

***Report on Quarterly Air Monitoring,
Area IV, Third Quarter 2018–2019***

***Santa Susana Field Laboratory
Ventura County, California***



***Prepared for:
United States
Department of Energy***

***Prepared by:
North Wind, Inc.***

June 2019

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Santa Susana Field Laboratory Ventura County, CA

June 2019

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PROFESSIONAL CERTIFICATION

**Report on Quarterly Air Monitoring, Area IV, Third Quarter 2018–2019
Santa Susana Field Laboratory
Ventura County, California**

June 2019

This report has been prepared by a team of qualified professionals under the supervision of the senior staff whose signatures appear below.



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EXECUTIVE SUMMARY

This report summarizes the United States Department of Energy (DOE) air monitoring activities conducted during the third quarter (Q3) of the 1-year baseline monitoring period (October 15, 2018, to January 14, 2019) at Area IV within the Santa Susana Field Laboratory (SSFL), located in Ventura County, California.

This quarterly report has been developed by North Wind, Inc., on behalf of DOE in cooperation with The Boeing Company (Boeing) and the National Aeronautics and Space Administration (NASA), as part of a Baseline Air Monitoring Program.

The objective of the Baseline Air Monitoring Program is to evaluate baseline (that is, pre-project) conditions and provide a basis for determining the magnitude of deviation from those baseline conditions resulting from onsite remediation activities (project) at SSFL. In accordance with the *Final Baseline Air Monitoring Work Plan, Santa Susana Field Laboratory, Ventura County, California* (NASA 2017), the responsible parties are monitoring for particulate matter less than 10 microns in aerodynamic diameter (PM₁₀), particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}), volatile organic compounds (VOCs), and radionuclides at 14 locations at SSFL. In addition, the Baseline Air Monitoring Program includes collection of meteorological data.

During Q3 of the Baseline Air Monitoring Program, station DOE-4 was severely damaged by the November 2018 Woolsey Fire. The data loss and station repairs are discussed throughout this report.

The following air monitoring activities conducted during Q3 2018–2019 by DOE within Area IV are summarized in this report:

- Collected meteorological data from one location (DOE-4);
- Collected PM₁₀ data from four locations (DOE-1 through -4);
- Collected air samples from four locations (DOE-1 through -4) for VOC laboratory analysis; and
- Collected radionuclide samples for laboratory analysis from four locations (DOE-1 through -4).

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
μCi	microcurie(s)
μg/m ³	microgram(s) per cubic meter
Boeing	The Boeing Company
CAAQS	California Ambient Air Quality Standard
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
DTSC	State of California Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
ETEC	Energy Technology Engineering Center
GC	gas chromatography
Hg	mercury
HHRA	Human Health Risk Assessment
Lpm	liter(s) per minute
mph	miles per hour
MS	mass spectrometry
m	meter(s)
m/sec	meter(s) per second
mb	millibar(s)
mL	milliliter(s)
MDA	minimum detectable activity
MDC	minimum detectable concentration
NASA	National Aeronautics and Space Administration
NIST	National Institute of Standards and Technology
pCi	picocurie(s)
PM _{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
PM ₁₀	particulate matter less than 10 microns in aerodynamic diameter
Q1	first quarter
Q2	second quarter
Q3	third quarter
QA	quality assurance
QC	quality control
RAWS	Remote Automatic Weather Stations
RPD	relative percent difference
RSL	regional screening level
SDG	sample delivery group
SSFL	Santa Susana Field Laboratory
VOC	volatile organic compound

1. INTRODUCTION

National Aeronautics and Space Administration (NASA), The Boeing Company (Boeing), and the U.S. Department of Energy (DOE), also known as the responsible parties, are performing baseline air monitoring at the Santa Susana Field Laboratory (SSFL) site located in Ventura County, California. The SSFL is a business segment of Boeing. SSFL operates the 2,849-acre SSFL located atop a range of hills between the Simi and San Fernando valleys, north of Los Angeles. The westernmost 290 acres of the SSFL, known as Area IV, contains both DOE and Boeing facilities. The DOE portion is mainly contained within the 90 acres known as the Energy Technology Engineering Center (ETEC).

When opened in the late 1950s, ETEC was ideally remote from population centers to enable development of security-sensitive projects. These projects supported research for DOE and its predecessor agencies for nuclear research and energy development. Area IV includes buildings that house test apparatus for large-scale heat transfer and fluid mechanics experiments, mechanical and chemical test facilities, office buildings, and auxiliary facilities.

Baseline air monitoring is being conducted in accordance with the *Final Baseline Air Monitoring Work Plan, Santa Susana Field Laboratory, Ventura County, California* (NASA 2017), which was submitted to the State of California Department of Toxic Substances Control (DTSC) on September 21, 2017. DTSC approved the Work Plan. Final locations of the air monitoring locations were approved by DTSC on January 30, 2018 (DTSC 2018a).

The objective of the Baseline Air Monitoring Program is to evaluate baseline (that is, pre-project) conditions and provide a basis for determining the magnitude of deviation from those baseline conditions resulting from onsite remediation activities (project) at SSFL. Responsible parties are monitoring for particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), and volatile organic compounds (VOCs), at 14 locations at SSFL. Data were collected for four perimeter samplers (DOE-1 through DOE-4) and analyzed for gross alpha and gross beta. Individual radionuclide concentrations were determined by analysis at an offsite laboratory for these same four locations. Meteorological data are also collected as a part of the Baseline Air Monitoring Program.

Figure 1 shows the air monitoring locations for the Baseline Air Monitoring Program. These locations were selected based on the areas to be remediated, with consideration of winds in the area, topographic features, and accessibility. The air monitoring sites were selected based on guidance obtained from the U.S. Environmental Protection Agency's (EPA's) *Quality Assurance Handbook for Air Pollution Measurement Systems*, Volume II, Ambient Air Monitoring Program (EPA 2017) and *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000). Sites were evaluated per 40 Code of Federal Regulations (CFR) 58, Appendix C – Ambient Air Quality Monitoring Methodology. DOE is responsible for DOE-1, DOE-2, DOE-3, and DOE-4 of the 14 monitoring locations, represented in Figure 1. VOCs, PM_{10} , and radionuclides are monitored at the four DOE monitoring locations, and meteorological conditions are monitored at the DOE-4 location. The DOE monitoring locations DOE-1 through DOE-4 are presented in Figure 2.

This report summarizes the quarterly results and quality assurance (QA) activities performed at the DOE locations between October 15, 2018, and January 14, 2019, which represents the third quarter (Q3) of the 1-year baseline monitoring period.

1.1 Regional Climate and Wind Direction

The climate in the area of SSFL is characterized as “Mediterranean.” The mean temperature during the winter months is approximately 50 degrees Fahrenheit (°F) and the mean temperature in the summer months is approximately 70°F. Based on climate data between 2011 and 2017 from the National Weather Service, rainfall has ranged from approximately 4 inches to approximately 14.5 inches on a calendar year basis. Average rainfall is on the order of 10.45 inches per year. The majority of the rainfall occurs between October and April.

The average hourly wind speed in Simi Valley varies significantly by season. The more turbulent part of the year lasts for 6 months, from November to April, with average western wind speeds of more than 7 miles per hour (mph). The calmer time of year lasts for 6 months, with northerly winds from May to October.

During the fall, winter, and spring, Santa Ana winds can blow from the north or northeast in excess of 35 mph.

2. ANALYTICAL SAMPLING EVENTS

VOCs are collected according to the EPA Toxic Compendium Method TO-15, *Determination of Volatile Organic Compounds (VOCs) Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)* (EPA 1999). Twenty-four-hour time-integrated samples are collected into Summa canisters via a flow controller and sent to an offsite laboratory for analysis. VOCs are collected every other week. There were six VOC sampling events in this reporting period. One field duplicate sample was collected during each sampling event.

During Q3, radionuclide samples were collected at four perimeter sampler locations, DOE-1 through DOE-4. These samples were collected on glass fiber (Type A/E) filters that are changed twice a week. After a minimum 120-hour holding time to allow the decay of short-lived radon and thoron daughters, the samples are simultaneously counted for gross alpha and beta activity with a low-background, thin-window, gas-flow proportional-counting system continually purged with P-10 argon/methane counting gas over a preset time interval. There were 27 radionuclide sampling events in this reporting period. Following analysis for gross alpha and gross beta radiation, all separate sample filters from each of the four locations were combined at each of the four sampling stations to form one composite sample at each location, except for the filter that was collecting data during the Woosley Fire. The four composite samples were then analyzed for individual radionuclides at an offsite laboratory.

The filters that were collecting data during the fire were omitted from the composite samples because the fire event was not indicative of baseline conditions. The four air filters from each of the four samplers that were collecting data during the fire were each analyzed separately for the individual radionuclides. The beginning and ending sample collection dates during the fire were as follows:

Sampler	Sample Start Date and Time	Sample Collection Date and Time
DOE-1	11/8/18 11:40	11/13/18 7:06
DOE-2	11/8/18 11:40	11/12/18 10:16
DOE-3	11/8/18 11:59	11/13/18 7:15
DOE-4	11/8/18 12:08	11/12/18 10:31

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3. DATA

Sections 3.1 through 3.4 discuss Q3 air monitoring data.

3.1 Meteorological Data

Meteorological data continued to be collected at the DOE-4 monitoring station. However, this station was severely damaged by the November 2018 Woolsey Fire associated with a prolonged Santa Ana wind episode. This resulted in significant loss of data from November 7 through December 18, 2018. Although the fire did not start until November 8, most data captured on November 7 was lost due to damage to a data logger caused by the fire. This data loss and station repair are discussed in more detail below and in the section on corrective actions.

Monitored meteorological parameters included wind speed, wind direction, air temperature at 2 meters (m) and 10 m, relative humidity, precipitation, barometric pressure, and solar radiation. In addition, statistical parameters provided by the data logger included delta temperature (i.e., difference between 10-m and 2-m temperature), maximum wind speed (i.e., wind gust), and standard deviation of wind direction. Observations were recorded at 15-minute intervals for :00, :15, :30; and :45 minutes each hour. There were 92 days in this reporting period, which covers October 15, 2018, through January 14, 2019, with a total of 8,832 possible 15-minute observations.

Data validation screening was performed on the recorded meteorological observations pursuant to EPA's *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000), Table 8.4 Screening Criteria and Table 8.3 Quality Control (QC) Codes. This validation screening provided the basis for evaluating data completeness and for determining sensor performance and/or maintenance status. It was performed routinely throughout the reporting period following each weekly data download. Data validation QC applied to the meteorological observations are defined in Table 1.

Table 1. Data screening quality control codes for meteorological data.

Code	Meaning	Description (as used for ETEC meteorological data validation)
0	Valid	PASS – Observation is accurate within the performance limits of the instrument (i.e., value passes all data validation screening criteria).
3	Acceptable	PASS – Observation originally failed data QC check (see Code 6), but additional review using other independent data and meteorological judgment support the final validity.
6	Failed initial QC check	FAIL – Observation did not pass data validation screening criteria.
7	Suspect	FAIL – Observation failed initial data validation QC check (see Code 6) and could not be verified through additional review using other independent data.
9	Missing	FAIL – Observation was not collected.

The validation screening involved comparing, on an individual parameter basis, the recorded values (i.e., observations) against the EPA screening criteria shown in Table 2. The data validation procedure involved an initial automated review to apply a first level QC Code of 0 (valid), 6 (failed), or 9 (missing), as defined in Table 1. Observations initially flagged with a QC Code = 6 were then manually (i.e., second-level) reviewed by a project meteorologist. The procedure is outlined below:

- Values meeting all screening criteria for the respective meteorological parameter were automatically deemed “valid” (QC Code = 0).
- Values not meeting a screening criteria were automatically flagged as “failed initial QC” (QC Code = 6). These values were subjected to second-level manual meteorological review using other available observations (e.g., 2-m vs. 10-m temperature at DOE-4, observations from nearby Remote Automatic Weather Stations [RAWS] meteorological station CEEC1 in the Cheeseboro Canyon, California, area located 2.6 miles south of the DOE-4 site) and meteorological judgment:
 - Values confirmed by this review were deemed “acceptable” (final QC Code = 3).
 - Otherwise, the values were deemed “suspect” (final QC Code = 7).
- Missing observations were automatically flagged as “missing” (QC Code = 9).

Values that pass validation with a final QC Code of 0 or 3 are included in the final validated meteorological data set. Values with a final QC Code of 7 or 9 were excluded from the final dataset and counted against the data completeness percentage for the respective monitored parameter. Screening criteria are listed in Table 2 along with a summary of the to-date screening results.

Table 2. Data screening summary for monitored meteorological parameters.

Meteorological Parameter	Screening Criteria ⁽¹⁾ (for valid sensor responses)	Data Completeness Percent (%) ⁽²⁾				
		Qtr #1	Qtr #2	Qtr #3	Qtr #4	Year to Date
Wind Speed	between 0 and 25 meters per second (m/sec)	58.59	100	55.36	-	71.36
	> 0.1 m/sec variation over 3 hours					
	> 0.5 m/sec variation over 12 hours					
Wind Direction	between 0 and 360 degrees	58.59	100	55.36	-	71.36
	> 1 degree variation over 3 hours					
	> 10 degree variation over 12 hours					
Standard Deviation of Wind Direction	Inherits the completeness stats of Wind Direction	58.59	100	55.36	-	71.36
Temperature @ 2 m	≤ local record high (monthly basis)	58.55	100	55.36	-	71.36
	≥ local record low (monthly basis)					
	> 0.5 degrees Celsius (°C) variation over 12 hours					
Temperature @ 10 m	≤ local record high (monthly basis)	58.59	100	55.36	-	71.36
	≥ local record low (monthly basis)					
	> 0.5°C variation over 12 hours					
Delta Temperature	≤ 0.1°C during daytime	58.59	99.99	55.36	-	71.36
	≥ -0.1°C during nighttime					
	between -3.0 and 5.0°C					
Relative Humidity (and Dewpoint Temperature)	relative humidity between 0-100%	57.80	97.72	25.62	-	60.39
	dew point T ≤ ambient T					
	dew point T ≤ 5.0°C variation over 1 hour					
	dew point T > 0.5°C variation over 12 hours					
Precipitation	≤ 1 inch in 1 hour	58.59	100	55.36	-	71.36
	≤ 4 inches in 24 hours					
	≥ 2 inches in 3 months					
Barometric Pressure	between 871 and 982 millibar (mb) (local) (i.e., between 940 and 1060 mb sea level)	58.59	100	55.36	-	71.36
	≤ 6 mb variation over 3 hours					
Solar Radiation	> 0 at night	58.57	100	55.36	-	71.36
	≤ maximum possible for date and latitude					
(1) Screening criteria from EPA Meteorological Monitoring Guidance (EPA 2000), Table 8.4 – Data Screening Criteria.						
(2) Data Completeness % = [Observations Passing] / [Possible 15-minute observations]]. Missing or suspect observations count against the data completeness statistics. The number of possible 15-minute observations in the Reporting Periods:						
• Qtr #1 = 8,736 (38-day delay to start of meteorological data collection resulted in missing data for this quarter)						
• Qtr #2 = 8,832						
• Qtr #3 = 8,736 (Nov 2018 wildfire damage to meteorological station resulted in missing data for this quarter)						
• Qtr #4 = 8,640						

The project data completeness goal for the meteorological data is 80% on an annual basis. Data completeness statistics for all completed reporting quarters are presented in Table 2. The data completeness goal was not achieved for first quarter (Q1) due to the data collection beginning 38 days after the start of the Baseline Air Monitoring Program. It was also not achieved for Q3 due to data loss caused by the November 2018 wildfire. Consequently, the year-to-date data completion remains below the project goal of 80%. Unfortunately, with the data loss that has occurred over the first three quarters of the Baseline Air Monitoring Program, the annual goal of 80% is now unattainable. Specific findings, sensor maintenance recommendations associated with the data screening, and repair activities are presented in Section 4.1.8 – Corrective Actions.

In summary, the data completeness for all monitored parameters in Q3 ranged from 25.62% for relative humidity to 55.36% for wind speed/direction, temperatures, precipitation, barometric pressure, and solar

radiation. All data statistics for Q1 through Q3 presented in Table 2 are based on both the initial (i.e., first-level) automated screening and second-level manual review. Note that the Q1 report presented data statistics based only on the first-level validation screening (i.e., without second-level manual review). However, with the second quarter (Q2) and Q3 reports, the Q1 data validation and completeness statistics have been revised to include both the first-level screening and second-level review.

The final validated 15-minute meteorological dataset was used to develop the windrose presented as Figure 3. A windrose is a graphical representation of wind speed and direction distribution (or climatology) for the period of interest. The frequency of winds blowing from a particular direction are shown as petals on the windrose, with the frequency of wind speeds depicted by color bands. During this monitoring quarter, approximately 45% of the wind data is missing due to station damage caused by the November 2018 wildfire. This is reflected in the significantly lower frequency percentages shown on this quarter's windrose (compared to previous quarters). The average and maximum wind speed at the site were 4.8 m/sec and 9.1 m/sec, respectively, based on the available observations. Note that other nearby undamaged meteorological stations [both National Weather Service (NWS) and RAWS] observed significantly higher sustained winds and gusts of 30–40 mph [13–18 meters/second (m/sec)] during the prolonged Santa Ana wind episode that contributed to the spread of the November 2018 wildfires. The predominant wind directions, based on available data, were from the north-northeast and east-southeast. Calm winds are identified as being less than 0.5 m/sec. The two predominant wind directions are associated with observed diurnal wind flow patterns.

3.2 PM₁₀ Data

PM₁₀ data are being collected with MetOne E-BAM monitors at four monitoring locations. The MetOne E-BAM uses the principle of beta attenuation to provide a determination of mass concentration. Twenty-four-hour concentrations are calculated from the hourly concentrations. There were 92 days in this reporting period. Monitors at locations DOE-1, DOE-2, and DOE-3 ran for all 92 days. The monitor at location DOE-4 was down for 41 of the 92 days (from November 8 to December 18) due to the November 2018 Woolsey wildfire, which had engulfed DOE-4 within two hours of origination. Data completeness for PM₁₀ exceeded the project goal of 80% completeness (see Table 3). The complete table of daily averages is presented in Appendix A.

Table 3. PM₁₀ data completeness for October 15, 2018 – January 14, 2019.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	92	92	100
DOE-2	92	92	100
DOE-3	92	92	100
DOE-4	51	92	55

The five highest PM₁₀ results identified for the reporting period are listed in Table 4 along with the California Ambient Air Quality Standard (CAAQS) for PM₁₀. PM₁₀ concentrations were consistent with levels typically found in urban air. All five concentrations recorded during this reporting period were recorded at locations DOE-1, DOE-2, DOE-3, and DOE-4. Four of the five values were above the CAAQS but below the National Ambient Air Quality Standard of 150 micrograms per cubic meter (µg/m³).

Table 4. Top five PM₁₀ 24-hour average concentration days.

Date	Location	PM ₁₀ Value (µg/m ³)	CAAQS (µg/m ³)
11/8/2018	DOE-2	66.12500	50
11/28/2018	DOE-1	59.04167	50
11/8/2018	DOE-1	55.12500	50
11/8/2018	DOE-3	51.25000	50
10/15/2018	DOE-4	46.45833	50

Bold text and gray shaded – Value exceeds CAAQS.

3.3 Volatile Organic Compound Data

There were six VOC sampling events in this reporting period. Each of the four DOE locations was sampled during each sampling event. Data completeness goals for VOCs exceeded the project goal of 85% (see Table 5).

Table 5. Ambient air VOC data completeness.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	6	6	100
DOE-2	6	6	100
DOE-3	6	6	100
DOE-4	6	6	100

VOC detection results are presented in Table 6, including comparison to the June 2018 DTSC Human Health Risk Assessment (HHRA) Note 3 Screening Levels (DTSC 2018b) or the May 2018 EPA Residential Air Regional Screening Levels (RSLs) (EPA 2018). One analyte, carbon disulfide (11 µg/m³), was detected above the DTSC HHRA during the Q3 reporting period. Fifteen results were detected above the respective EPA Residential Air RSL during the Q3 reporting period; these detections were located at DOE-1, DOE-2, DOE-3, and DOE-4. Complete VOC analytical results are presented in Appendix B.

Table 6. Ambient air VOC detection results compared to RSLs.

Location ID	Sample Date	Analyte	Result (µg/m ³)	Screening Level Value (µg/m ³)	SL Source
DOE-1	10/24/2018	Dichlorodifluoromethane	3	100	US EPA RSL
DOE-1	10/24/2018	Ethyl acetate	8.8	73	US EPA RSL
DOE-1	10/24/2018	Toluene	4.9	310	DTSC HHRA Note 3
DOE-1	11/6/2018	1,2-dimethyl-benzene	2	63	US EPA RSL
DOE-1	11/6/2018	Dichlorodifluoromethane	3	73	US EPA RSL
DOE-1	11/6/2018	Ethyl acetate	1.7	1.1	US EPA RSL
DOE-1	11/6/2018	Ethylbenzene	4.8	0.13	US EPA RSL
DOE-1	11/6/2018	m,p-Xylene	8.2	11	US EPA RSL
DOE-1	11/6/2018	Toluene	3.2	310	DTSC HHRA Note 3
DOE-1	11/6/2018	Xylenes (Total)	11	100	US EPA RSL
DOE-1	11/20/2018	4-Ethyltoluene ¹	4.9	-----	-----
DOE-1	12/4/2018	Trichlorofluoromethane	2.5	1300	DTSC HHRA Note 3

Location ID	Sample Date	Analyte	Result (µg/m³)	Screening Level Value (µg/m³)	SL Source
DOE-1	12/20/2018	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-1	12/20/2018	Ethyl acetate	2.4	1.1	US EPA RSL
DOE-1	1/3/2019	Ethyl acetate	1.4	1.1	US EPA RSL
DOE-2	10/24/2018	Dichlorodifluoromethane	3	73	US EPA RSL
DOE-2	10/24/2018	Ethyl acetate	3.4	1.1	US EPA RSL
DOE-2	11/6/2018	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-2	11/6/2018	Ethyl acetate	1.8	1.1	US EPA RSL
DOE-2	12/4/2018	Trichlorofluoromethane	2.4	1300	DTSC HHRA Note 3
DOE-2	12/20/2018	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-2	12/20/2018	Ethyl acetate	1.5	1.1	US EPA RSL
DOE-3	10/24/2018	Dichlorodifluoromethane	3	73	US EPA RSL
DOE-3	10/24/2018	Ethyl acetate	5.8	1.1	US EPA RSL
DOE-3	11/6/2018	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-3	11/6/2018	Ethyl acetate	2.4	1.1	US EPA RSL
DOE-3	11/20/2018	Ethyl acetate	2.3	1.1	US EPA RSL
DOE-3	12/4/2018	Toluene	3.5	310	DTSC HHRA Note 3
DOE-3	12/4/2018	Trichlorofluoromethane	2.4	1300	DTSC HHRA Note 3
DOE-3	12/20/2018	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-3	12/20/2018	Ethyl acetate	2.1	1.1	US EPA RSL
DOE-3	1/3/2019	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-4	10/24/2018	Dichlorodifluoromethane	3	73	US EPA RSL
DOE-4	10/24/2018	Ethyl acetate	3.3	1.1	US EPA RSL
DOE-4	11/6/2018	Carbon disulfide	11	0.067	DTSC HHRA Note 3
DOE-4	11/6/2018	Dichlorodifluoromethane	3	73	US EPA RSL
DOE-4	11/6/2018	Ethyl acetate	2.2	1.1	US EPA RSL
DOE-4	11/20/2018	Ethyl acetate	1.5	1.1	US EPA RSL
DOE-4	12/4/2018	Dichlorodifluoromethane	3	73	US EPA RSL
DOE-4	12/20/2018	Dichlorodifluoromethane	2	73	US EPA RSL
DOE-4	12/20/2018	Ethyl acetate	1.9	1.1	US EPA RSL

Bold text and gray shaded – detection above the reporting limit, and also exceeds the EPA or DTSC Screening Level.

1- RSL based on surrogate 1,1,1,2-Tetrafluoroethane (1,2-Dichlorotetrafluoroethane); 1,2-Dichlorobenzene (1,3-Dichlorobenzene); TPH, aromatic medium (4-Ethyltoluene); and TPH, aliphatic medium (n-Octane).

3.4 Radionuclide Data

There were 27 sampling events for air samplers DOE-1 through DOE-3 during this reporting period. Sampler DOE-4 was out of service because of the Woolsey Fire; this sampler operated from October 15 through November 12, 2018 (nine sampling events). Radionuclide samples were collected on glass fiber filters, as discussed in Section 2, and analyzed at the site. Results of gross alpha and gross beta along with the minimum detectable concentration (MDC) for the air samplers are provided in Table 7. Most results for gross alpha and gross beta were less than the MDC.

Results for the individual radionuclides from air samplers DOE-1 through DOE-4 are reported in Table 8. All air filters for a sampling station, except for those that were collecting data during the Woosley Fire, were combined to form a composite sample. The filters that were collecting data during the fire were omitted from the composite samples because the fire event was not indicative of baseline conditions. The four air filters from each of the four samplers that were collecting data during the fire were each analyzed separately for the individual radionuclides. Data for these samples are reported in Table 9.

The four composite samples and four individual samples collected during the fire were processed at the laboratory and analyzed for the individual radionuclides. The laboratory reports the individual radionuclide data in units of picocuries (pCi)/sample. These data are converted to airborne radioactivity concentrations by dividing by the volume of air represented by each composite sample or single filter sample. Reporting units are microcuries (μCi)/milliliter (mL) as is referenced in the California regulations. Note that while each air sampler operated at approximately 35 liters per minute (Lpm) the 4-inch-diameter filters had to be cut into 1.85-inch-diameter circles to be analyzed onsite in the gas flow proportional counter. These smaller-diameter filters were sent to the laboratory for analysis; therefore, the air volume represented by each individual filter was reduced accordingly (by a factor of 4.67).

The data for individual radionuclides was independently validated. Most results were non-detect.

3.4.1 Analytical Results for the Composite Samples

Uranium-233/234 and uranium-238 are naturally occurring and were the only radionuclides that were detected without data validation qualifiers. Both uranium isotopes were detected in higher concentrations in the blank filter sent to the lab from ETEC. Thus, the detection of uranium could be a laboratory analytical artifact.

Thorium-228, thorium-230, thorium-232, beryllium-7, and polonium-210 are naturally occurring and were reported above the laboratory detection level. However, the independent validator qualified these as “estimated” (J-qualified) due to noted laboratory interferences.

Cobalt-60 was reported above the laboratory detection level at sampler DOE-2. Manganese-54 was reported above the laboratory detection level at DOE-4. The validator qualified these results as “estimated.” Manganese-54 has a radioactive half-life of approximately 300 days. It would no longer be present at the site. Cobalt-60 has a 5.2-year half-life and although it could still be present at the site, it is likely to be a false positive result.

3.4.2 Analytical Results for Samples Collected during Woolsey Fire

The single filters that were collecting data at each of the four sampling stations during the fire were all analyzed. The naturally occurring radionuclides actinium-228, radium-226, radium-228, and thorium-230 were detected. However, the independent validator qualified thorium-230 as “estimated” (J-qualified) due to noted laboratory interferences.

Naturally occurring radium-226 was detected above the gamma spectroscopy MDA at DOE-2 but not in the more sensitive and accurate result performed via chemical extraction and alpha particle analysis. Therefore the gamma spectroscopy result is disregarded.

Naturally occurring actinium-228 and radium-228 were reported above the gamma spectroscopy MDA in the sample from DOE-4. The laboratory analyzes for the gamma energies of actinium-228 and then infers an equal amount of radium-228 because these two radionuclides should be in equilibrium. The more sensitive and accurate radium-228 results performed via chemical extraction of radium and beta particle

analysis did not detect radium-228 (and by inference of radioactive equilibrium actinium-228). Therefore the gamma spectroscopy results for these two radionuclides are disregarded.

Plutonium-239/240 was detected at DOE-3 at a concentration of 2.89E-15 uCi/mL. Strontium-90 was detected at DOE-3 at a concentration of 3.43E-14. The detection of plutonium 239/240 and strontium-90 was unexpected because sampler DOE-3 was upwind of the fire.

Only a part of each filter is sent to the laboratory for analysis and another portion of the filters are retained at the site. This allows sample reanalysis. A portion of the sample filters from sampler DOE-3 was sent for analysis. Laboratory results for the reanalysis were validated by an independent data validator. Plutonium-239/240 and strontium-90 were not detected in the reanalyzed filter.

The analytical results from sampler DOE-3 for the initial filter analysis and the sample reanalysis are shown in Table 9. Initial analytical results and reanalysis results that are less than the analytical MDA cannot be compared because the data are below the laboratory detection capability. Naturally occurring uranium-238 and thorium-230 were reported above the MDA in the initial samples but not in the validated sample reanalysis. Naturally occurring actinium-228 and radium-228 were reported above the gamma spectroscopy MDA in the sample reanalysis but not in the initial sample. The laboratory analyzes for the gamma energies of actinium-228 and then infers an equal amount of radium-228 because these two radionuclides should be in equilibrium. The more sensitive and accurate radium-228 results performed via chemical extraction of radium and beta particle analysis did not detect radium-228 (and by inference of radioactive equilibrium actinium-228). Therefore the gamma spectroscopy results for these two radionuclides are disregarded. The detection of manganese-54 in the reanalyzed sample is considered a false positive because the half-life of manganese-54 is too short for it to still be present at the site.

Table 7. Gross alpha and gross beta air sample results for air samplers.

Sample Collection Date	Gross Alpha ($\mu\text{Ci/mL}$)	Gross Alpha minimum detectable activity (MDA) ($\mu\text{Ci/mL}$)	Gross Beta ($\mu\text{Ci/mL}$)	Gross Beta MDC ($\mu\text{Ci/mL}$)
Sample Location – DOE-1				
10/15/18	1.68E-15	9.81E-15	6.47E-14	2.21E-13
10/18/18	1.08E-14	1.31E-14	-3.54E-14	2.94E-13
10/22/18	5.05E-16	9.82E-15	2.01E-13	2.21E-13
10/25/18	1.00E-14	1.31E-14	2.22E-13	2.94E-13
10/29/18	7.57E-15	9.85E-15	2.42E-13	2.21E-13
11/1/18	6.90E-15	1.30E-14	1.85E-13	2.93E-13
11/5/18	-8.30E-17	9.92E-15	-5.11E-14	2.23E-13
11/8/18	2.18E-15	1.27E-14	4.19E-14	2.86E-13
11/13/18*	6.78E-15	8.17E-15	1.13E-13	1.84E-13
11/15/18	-4.70E-15	1.90E-14	3.33E-13	4.28E-13
11/19/18	2.87E-15	9.86E-15	2.41E-13	2.22E-13
11/21/18	1.55E-14	1.88E-14	9.07E-13	4.75E-13
11/26/18	1.92E-15	7.29E-15	8.33E-14	1.84E-13
11/29/18	6.71E-15	3.35E-14	-3.17E-14	7.39E-13
11/30/18	-3.54E-14	9.73E-14	-6.85E-13	2.15E-12
12/3/18	6.43E-16	1.39E-14	-1.42E-13	3.07E-13
12/6/18	-1.67E-15	1.55E-14	1.42E-13	3.42E-13
12/10/18	-3.77E-16	1.11E-14	-1.27E-13	2.35E-13
12/13/18	2.94E-16	1.40E-14	-4.92E-14	2.98E-13

Sample Collection Date	Gross Alpha (μCi/mL)	Gross Alpha minimum detectable activity (MDA) (μCi/mL)	Gross Beta (μCi/mL)	Gross Beta MDC (μCi/mL)
12/17/18	Malfunction, no sample	Malfunction, no sample	Malfunction, no sample	Malfunction, no sample
12/20/18	-4.86E-16	1.42E-14	-1.45E-13	3.03E-13
12/24/18	2.03E-15	1.09E-14	2.07E-14	2.32E-13
12/26/18	5.20E-15	2.16E-14	1.92E-14	4.59E-13
12/31/18	-7.60E-16	8.52E-15	2.20E-14	1.81E-13
1/3/19	-2.29E-15	1.01E-14	9.22E-15	2.16E-13
1/7/19	6.36E-16	8.38E-15	4.10E-15	1.80E-13
1/10/19	-1.00E-15	1.32E-14	9.30E-15	2.84E-13
1/15/19	5.69E-16	7.50E-15	2.76E-14	1.61E-13
Sample Location – DOE-2				
10/15/18	3.44E-15	9.81E-15	8.75E-14	2.21E-13
10/18/18	-2.46E-15	1.31E-14	-6.27E-14	2.94E-13
10/22/18	5.79E-15	9.82E-15	8.03E-14	2.21E-13
10/25/18	1.16E-14	1.31E-14	3.89E-13	2.94E-13
10/29/18	9.92E-15	9.84E-15	2.93E-13	2.21E-13
11/1/18	5.34E-15	1.30E-14	1.35E-13	2.93E-13
11/5/18	-8.30E-17	9.91E-15	-5.11E-14	2.23E-13
11/8/18	6.54E-16	1.27E-14	2.32E-14	2.86E-13
11/12/18*	7.66E-15	9.96E-15	2.67E-13	2.24E-13
11/15/18	-1.73E-15	1.35E-14	1.04E-13	3.04E-13
11/19/18	3.41E-15	9.75E-15	4.76E-14	2.19E-13
11/21/18	1.45E-15	1.89E-14	5.46E-13	4.75E-13
11/26/18	1.01E-15	7.29E-15	2.87E-14	1.84E-13
11/29/18	-1.71E-16	3.34E-14	5.96E-14	7.36E-13
11/30/18	-5.33E-15	9.44E-14	9.92E-14	2.08E-12
12/3/18	1.36E-15	1.40E-14	8.53E-14	3.09E-13
12/6/18	-5.65E-15	1.55E-14	1.65E-13	3.42E-13
12/10/18	8.42E-16	1.11E-14	3.61E-14	2.36E-13
12/13/18	2.61E-15	1.40E-14	-5.55E-14	2.98E-13
12/17/18	1.44E-15	1.10E-14	-1.53E-13	2.34E-13
12/20/18	1.05E-15	1.38E-14	-2.05E-13	2.93E-13
12/24/18	-1.57E-15	1.09E-14	1.78E-13	2.32E-13
12/26/18	-1.92E-15	2.16E-14	9.21E-14	4.59E-13
12/31/18	1.11E-15	8.50E-15	-1.14E-13	1.81E-13
1/3/19	-1.54E-15	1.01E-14	1.73E-13	2.17E-13
1/7/19	-1.15E-15	7.59E-15	8.44E-14	1.62E-13
1/10/19	-5.02E-15	1.32E-14	2.53E-13	2.83E-13
1/15/19	-2.15E-15	7.09E-15	1.20E-13	1.52E-13

Sample Collection Date	Gross Alpha (μCi/mL)	Gross Alpha minimum detectable activity (MDA) (μCi/mL)	Gross Beta (μCi/mL)	Gross Beta MDC (μCi/mL)
Sample Location – DOE-3				
10/15/18	2.26E-15	9.81E-15	1.45E-13	2.21E-13
10/18/18	5.37E-15	1.31E-14	1.47E-13	2.94E-13
10/22/18	8.14E-15	9.82E-15	1.10E-13	2.21E-13
10/25/18	3.80E-15	1.31E-14	8.30E-14	2.94E-13
10/29/18	6.39E-15	9.85E-15	2.14E-13	2.21E-13
11/1/18	-1.67E-15	1.30E-14	-2.57E-14	2.93E-13
11/5/18	-1.86E-15	9.92E-15	-4.38E-14	2.23E-13
11/8/18	4.46E-15	1.27E-14	1.52E-13	2.86E-13
11/13/18*	1.40E-15	8.17E-15	1.14E-13	1.84E-13
11/15/18	-1.58E-16	1.88E-14	1.75E-13	4.23E-13
11/19/18	4.66E-15	9.92E-15	-4.98E-15	2.23E-13
11/21/18	6.12E-15	1.88E-14	-4.54E-14	4.75E-13
11/26/18	3.27E-15	7.29E-15	1.19E-13	1.84E-13
11/29/18	-6.82E-15	1.64E-14	-7.41E-14	3.62E-13
12/3/18	-3.37E-15	1.08E-14	2.18E-13	2.38E-13
12/6/18	-7.24E-15	1.55E-14	9.77E-14	3.42E-13
12/10/18	3.89E-15	1.11E-14	-9.86E-14	2.35E-13
12/13/18	4.92E-15	1.40E-14	-9.65E-14	2.98E-13
12/17/18	4.92E-15	1.40E-14	-9.65E-14	2.98E-13
12/20/18	-1.23E-15	1.38E-14	-3.28E-14	2.93E-13
12/24/18	-9.77E-16	1.10E-14	1.41E-13	2.33E-13
12/26/18	1.62E-15	2.14E-14	-3.25E-13	4.55E-13
12/31/18	1.59E-15	8.54E-15	-1.27E-13	1.82E-13
1/3/19	0.00E+00	1.00E-14	-1.89E-13	2.15E-13
1/7/19	1.10E-15	7.25E-15	1.42E-13	1.55E-13
1/10/19	-1.62E-15	1.07E-14	-7.27E-15	2.29E-13
1/15/19	-5.07E-16	6.68E-15	3.81E-14	1.43E-13
Sample Location – DOE-4				
10/15/18	2.85E-15	9.81E-15	2.15E-14	2.21E-13
10/18/18	3.81E-15	1.31E-14	1.41E-13	2.94E-13
10/22/18	8.13E-15	9.82E-15	7.56E-14	2.21E-13
10/25/18	1.45E-15	1.31E-14	2.61E-13	2.94E-13
10/29/18	5.21E-15	9.85E-15	1.52E-13	2.21E-13
11/1/18	-1.67E-15	1.30E-14	-2.57E-14	2.93E-13
11/5/18	2.29E-15	9.92E-15	1.37E-13	2.23E-13
11/8/18	4.46E-15	1.27E-14	6.68E-14	2.86E-13
11/12/18*	9.46E-15	9.98E-15	1.66E-13	2.24E-13

*Result for sample collected during the fire.

Table 8. Individual radionuclide analysis for the composite filter samples.

Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μ Ci/mL)
Location DOE-1 – Air volume/sample = 9.5E8 mL				
Actinium-228	3.8	41.7	U U	4.00E-15
Beryllium-7	160	59.8	J	1.68E-13
Cesium-137	-8.15	19.1	U U	-8.58E-15
Cobalt-60	-5.05	21.8	U U	-5.32E-15
Manganese-54	-5.18	14	U U	-5.45E-15
Potassium-40	51.1	165	U U	5.38E-14
Radium-226 ²	0	241	U U	0.00E+00
Radium-228 ²	3.8	41.7	U U	4.00E-15
Thorium-228	0.471	0.361	J	4.96E-16
Thorium-230	0.715	0.356	J	7.53E-16
Thorium-232	0.521	0.158	J	5.48E-16
Uranium-233/234	0.667	0.202		7.02E-16
Uranium-235/236	0.0754	0.113	U U	7.94E-17
Uranium-238	0.938	0.0908		9.87E-16
Plutonium-238	0.0309	0.225	U U	3.25E-17
Plutonium-239/240	0.0372	0.139	U U	3.92E-17
Americium-241	0.0255	0.17	U U	2.68E-17
Polonium-210	8.95	0.46	J	9.42E-15
Plutonium-241	1.4	5.44	U U	1.47E-15
Strontium-90	-0.246	1.25	U U	-2.59E-16
Radium-228 ³	0.86	2.59	U U	9.05E-16
Radium-226 ³	0.752	0.738	J	7.92E-16
Location DOE-2 – Air volume/sample = 9.94E8 mL				
Actinium-228	19.6	26.3	U U	1.97E-14
Beryllium-7	147	29.7	J	1.48E-13
Cesium-137	-2.45	19.2	U U	-2.46E-15
Cobalt-60	8	5.36	J	8.05E-15
Manganese-54	-1.81	12.5	U U	-1.82E-15
Potassium-40	18.3	179	U U	1.84E-14
Radium-226 ²	227	151	UJ	2.28E-13
Radium-228 ²	19.6	26.3	U U	1.97E-14
Thorium-228	0.484	0.354	J	4.87E-16
Thorium-230	0.631	0.417	J	6.35E-16
Thorium-232	0.394	0.202	J	3.96E-16
Uranium-233/234	0.876	0.297		8.81E-16
Uranium-235/236	0.132	0.198	U U	1.33E-16
Uranium-238	0.795	0.159		8.00E-16
Plutonium-238	0.0391	0.195	U U	3.93E-17
Plutonium-239/240	0.0456	0.126	U U	4.59E-17
Americium-241	0.0262	0.0785	U U	2.64E-17
Polonium-210	9.21	1.15	J	9.27E-15
Plutonium-241	1.4	5.54	U U	1.41E-15
Strontium-90	1.09	1.2	U U	1.10E-15
Radium-228 ³	0.873	2.61	U U	8.78E-16

Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μCi/mL)
Radium-226 ³	0.837	0.734	<i>J</i>	8.42E-16
Location DOE-3 – Air volume/sample = 1.022E9 mL				
Actinium-228	6.33	44.7	U U	6.19E-15
Beryllium-7	155	30.1	<i>J</i>	1.52E-13
Cesium-137	-13.6	24.1	U U	-1.33E-14
Cobalt-60	2.84	14.7	U U	2.78E-15
Manganese-54	-6.6	17.8	U U	-6.46E-15
Potassium-40	-7.24	260	U U	-7.08E-15
Radium-226 ²	-164	268	U U	-1.60E-13
Radium-228 ²	6.33	44.7	U U	6.19E-15
Thorium-228	0.323	0.349	U U	3.16E-16
Thorium-230	0.552	0.347	<i>J</i>	5.40E-16
Thorium-232	0.451	0.153	<i>J</i>	4.41E-16
Uranium-233/234	0.818	0.188		8.00E-16
Uranium-235/236	0	0.105	U U	0.00E+00
Uranium-238	0.894	0.136	U U	8.75E-16
Plutonium-238	0.0305	0.247	U U	2.98E-17
Plutonium-239/240	-0.0122	0.137	U U	-1.19E-17
Americium-241	0.0314	0.255	U U	3.07E-17
Polonium-210	8.45	0.225	<i>J</i>	8.27E-15
Plutonium-241	1.29	6.48	U U	1.26E-15
Strontium-90	0.129	1.11	U U	1.26E-16
Radium-228 ³	1.11	2.74	U U	1.09E-15
Radium-226 ³	0.477	0.803	U U	4.67E-16
Location DOE-4 – Air volume/sample = mL				
Actinium-228	-0.103	45.8	U U	-2.98E-16
Beryllium-7	25.4	95.7	U U	7.34E-14
Cesium-137	-0.237	12.1	U U	-6.85E-16
Cobalt-60	-1.2	15	U U	-3.47E-15
Manganese-54	4.07	3.65	<i>J</i>	1.18E-14
Potassium-40	-47.5	180	U U	-1.37E-13
Radium-226 ²	-86.9	194	U U	-2.51E-13
Radium-228 ²	-0.103	45.8	U U	-2.98E-16
Thorium-228	0.0979	0.351	U U	2.83E-16
Thorium-230	0.0249	0.413	U U	7.20E-17
Thorium-232	-0.0151	0.2	U U	-4.36E-17
Uranium-233/234	0.449	0.0962		1.30E-15
Uranium-235/236	0.0199	0.223	U U	5.75E-17
Uranium-238	0.12	0.155	U U	3.47E-16
Plutonium-238	0.182	0.2	U U	5.26E-16
Plutonium-239/240	0.0352	0.131	U U	1.02E-16
Americium-241	0.117	0.119	U U	3.38E-16
Polonium-210	4.62	0.322	<i>J</i>	1.34E-14
Plutonium-241	0.756	5.88	U U	2.18E-15
Strontium-90	0.235	1.09	U U	6.79E-16
Radium-228 ³	3.78	3.17	<i>J</i>	1.09E-14

Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μCi/mL)
Radium-226 ³	0.421	0.857	U U	1.22E-15

¹ Qualifier column contains laboratory flags (normal font) and validation qualifiers (italics).

² Results determined by gamma spectroscopy have a higher MDC than when determined by radium extraction and alpha or beta analysis. Radium-226 analyses by gamma spectroscopy have an interference with uranium-235 that is hard to resolve. All results for radium-226 and radium-228 are less than the airborne effluent limits shown in 10 CFR 20 Appendix B, Table 2, even when the higher MDC values are used.

³ Results determined by radium extraction and alpha or beta analysis. Barium is used as a chemical carrier to determine the radium chemical yield. All samples had an interference. The barium percent yield was out of laboratory tolerance of ± 40 to 110%. In all cases the carrier yield was higher than 110%. This means that all reported results for radium-226 and radium-228 alpha or beta analysis are biased low. All analytical results for radium-226 and radium-228 are at least 1,000 times less than the airborne effluent limits shown in 10 CFR 20, Appendix B, Table 2. Thus, even though there is a low bias in the results, the data are still several orders of magnitude less than the airborne effluent limits.

Table 9. Individual radionuclide analysis for the filter samples collected during the fire.

Radionuclide	Result (pCi/sample)	Minimum Detectable Concentration (pCi/sample)	Data Qualifier	Airborne Concentration (uCi/ml)
Location DOE-1 – Air volume/sample = 5.19E7 ml				
Actinium-228	28	21.7	<i>J</i>	5.39E-13
Beryllium-7	-1.36	112	<i>UU</i>	-2.62E-14
Cesium-137	-2.12	18.8	<i>U U</i>	-4.08E-14
Cobalt-60	0.64	15.9	<i>U U</i>	1.23E-14
Manganese-54	4.01	12	<i>U U</i>	7.73E-14
Potassium-40	18.6	197	<i>U U</i>	3.58E-13
Radium-226 ¹	6.88	219	<i>U U</i>	1.33E-13
Radium-228 ¹	28	21.7	<i>J</i>	5.39E-13
Uranium-233/234	0.187	0.216	<i>U U</i>	3.60E-15
Uranium-235/236	0.0269	0.173	<i>U U</i>	5.18E-16
Uranium-238	0.0934	0.178	<i>U U</i>	1.80E-15
Americium-241	0	0.155	<i>U U</i>	0.00E+00
Plutonium-238	0.0411	0.243	<i>U U</i>	7.92E-16
Plutonium-239/240	0.0935	0.102	<i>U U</i>	1.80E-15
Polonium-210	0.398	0.422	<i>U U</i>	7.67E-15
Strontium-90	0.0259	1.17	<i>U U</i>	4.99E-16
Radium-228 ²	3.37	4.38	<i>U U</i>	6.49E-14
Plutonium-241	0.855	6.16	<i>U U</i>	1.65E-14
Thorium-228	-0.0457	0.788	<i>U U</i>	-8.81E-16
Thorium-230	0.516	0.796	<i>U U</i>	9.94E-15
Thorium-232	0.0506	0.366	<i>U U</i>	9.75E-16
Radium-226 ²	0.574	0.706	<i>U U</i>	1.11E-14
Location DOE-2 – Air volume/sample = 4.26E7 ml				
Actinium-228	11.6	26.4	<i>U U</i>	2.72E-13
Beryllium-7	29.9	109	<i>U U</i>	7.02E-13
Cesium-137	-10.3	20.8	<i>U U</i>	-2.42E-13
Cobalt-60	-2.23	14.6	<i>U U</i>	-5.23E-14
Manganese-54	-7.21	15.2	<i>U U</i>	-1.69E-13
Potassium-40	-103	218	<i>U U</i>	-2.42E-12
Radium-226 ¹	249	136		5.85E-12
Radium-228 ¹	11.6	26.4	<i>U U</i>	2.72E-13
Americium-241	-0.0335	0.258	<i>U U</i>	-7.86E-16
Plutonium-238	0.0821	0.283	<i>U U</i>	1.93E-15
Plutonium-239/240	0.116	0.169	<i>U U</i>	2.72E-15
Uranium-233/234	0.0837	0.147	<i>U U</i>	1.96E-15
Uranium-235/236	-0.00947	0.183	<i>U U</i>	-2.22E-16
Uranium-238	-0.0076	0.147	<i>U U</i>	-1.78E-16
Polonium-210	0.217	0.333	<i>U U</i>	5.09E-15
Strontium-90	0.418	1.14	<i>U U</i>	9.81E-15

Radionuclide	Result (pCi/sample)	Minimum Detectable Concentration (pCi/sample)	Data Qualifier	Airborne Concentration (uCi/ml)
Radium-228	0.84	4.29	U U	1.97E-14
Plutonium-241	-0.723	7.68	U U	-1.70E-14
Thorium-228	-0.0448	0.915	U U	-1.05E-15
Thorium-230	1.12	0.804	J	2.63E-14
Thorium-232	0.166	0.522	U U	3.90E-15
Radium-226 ²	0.24	0.924	U U	5.63E-15
Original Data DOE-3 – 5.19E7 ml				
Actinium-228	0.711	47.4	U U	1.37E-14
Beryllium-7	-17	146	U U	-3.28E-13
Cesium-137	-10.9	22.2	U U	-2.10E-13
Cobalt-60	-15.4	27	U U	-2.97E-13
Manganese-54	0.471	12	U U	9.08E-15
Potassium-40	0	146	U U	0.00E+00
Radium-226 ¹	-56	255	U U	-1.08E-12
Radium-228 ¹	0.711	47.4	U U	1.37E-14
Americium-241	0.104	0.213	U U	2.00E-15
Plutonium-238	0.0261	0.293	U U	5.03E-16
Plutonium-239/240	0.15	0.126		2.89E-15
Uranium-233/234	0.0559	0.155	U U	1.08E-15
Uranium-235/236	0.0398	0.119	U U	7.67E-16
Uranium-238	0.215	0.154		4.14E-15
Polonium-210	0.131	0.422	U U	2.52E-15
Strontium-90	1.78	1.19		3.43E-14
Radium-228	2.54	4.39	U U	4.89E-14
Plutonium-241	0.73	5.93	U U	1.41E-14
Thorium-228	0.0434	0.684	U U	8.36E-16
Thorium-230	0.976	0.796	J	1.88E-14
Thorium-232	0.29	0.433	U U	5.59E-15
Radium-226	0.554	0.746	U U	1.07E-14
Reanalyzed Sample for Location DOE-3 – 5.19E7 ml				
Actinium-228	18.3	17.7		3.53E-13
Beryllium-7	-33	118	U U	-6.36E-13
Cesium-137	1.97	8.28	U U	3.80E-14
Cobalt-60	-3.54	15	U U	-6.82E-14
Manganese-54	5.55	3.65		1.07E-13
Potassium-40	35.3	118	U U	6.80E-13
Radium-226 ¹	-108	189	U U	-2.08E-12
Radium-228 ¹	18.3	17.7		3.53E-13
Americium-241	0.0631	0.111	U U	1.22E-15
Plutonium-238	0.0462	0.128	U U	8.90E-16
Plutonium-239/240	-0.0264	0.177	U U	-5.09E-16

Radionuclide	Result (pCi/sample)	Minimum Detectable Concentration (pCi/sample)	Data Qualifier	Airborne Concentration (uCi/ml)
Uranium-233/234	0.0669	0.25	U U	1.29E-15
Uranium-235/236	0.0277	0.311	U U	5.34E-16
Uranium-238	0.0223	0.249	U U	4.30E-16
Polonium-210	0.349	0.378	U U	6.72E-15
Strontium-90	0.0575	1.11	U U	1.11E-15
Radium-228	2.61	3.51	U U	5.03E-14
Plutonium-241	-0.433	5.7	U U	-8.34E-15
Thorium-228	-0.0455	0.292	U U	-8.77E-16
Thorium-230	0.121	0.398	U U	2.33E-15
Thorium-232	0.0115	0.286	U U	2.22E-16
Radium-226	0.0915	0.76	U U	1.76E-15
Location DOE-4 – Air volume/sample = 4.25E7 ml				
Actinium-228	23.1	15.3		5.44E-13
Beryllium-7	21.2	79.4	U U	4.99E-13
Cesium-137	9.09	11.6	U U	2.14E-13
Cobalt-60	1.13	17.7	U U	2.66E-14
Manganese-54	-8.01	16.3	U U	-1.88E-13
Potassium-40	-82.4	193	U U	-1.94E-12
Radium-226 ¹	25.9	183	U U	6.09E-13
Radium-228 ¹	23.1	15.3		5.44E-13
Americium-241	0.0931	0.239	U U	2.19E-15
Plutonium-238	0.0598	0.269	U U	1.41E-15
Plutonium-239/240	0.0532	0.0798	U U	1.25E-15
Uranium-233/234	0.0434	0.162	U U	1.02E-15
Uranium-235/236	-0.009	0.174	U U	-2.12E-16
Uranium-238	0.0144	0.162	U U	3.39E-16
Polonium-210	0.367	0.371	U U	8.64E-15
Strontium-90	0.0195	1.08	U U	4.59E-16
Radium-228	0.919	3.8	U U	2.16E-14
Plutonium-241	-0.484	6.13	U U	-1.14E-14
Thorium-228	-0.44	0.93	U U	-1.04E-14
Thorium-230	0.221	0.731	U U	5.20E-15
Thorium-232	0.135	0.522	U U	3.18E-15
Radium-226	0.304	0.738	U U	7.15E-15

¹Results determined by gamma spectroscopy have a higher minimum detectable concentration than when determined by radium extraction and alpha or beta analysis. Radium-226 analyses by gamma spectroscopy have an interference with uranium-235 that is hard to resolve. All results for radium-226 and radium-228 are less than the airborne effluent limits shown in 10CFR20 Appendix B, Table 2 even when the higher MDC values are used.

4. QA/QC ACTIVITIES

The following QA/QC activities were conducted for the PM₁₀, VOC, radionuclide, and meteorological data collection and analysis.

4.1 Field QA/QC

4.1.1 PM₁₀

The 24-hour daily averages for Q3 are presented in Appendix A along with the monthly average minimum, maximum, and 95th percentile for each station location.

Flow Verifications

Functionality of the MetOne E-BAM units is verified and recorded monthly during instrument audits; however, the instruments are also checked several times a week for operability. During the monthly audits, the MetOne E-BAM temperature, pressure, and flow rate are verified against a National Institute of Standards and Technology (NIST) traceable flowmeter. None of the results exceeded the flow rate measurement quality objective of +/- 7%.

4.1.2 VOCs

A minimum of 20% of the VOC results are undergoing third-party data validation. During this quarter, one of the six sample delivery groups (SDGs), SDG 320-44996-1, underwent data validation.

4.1.3 Field Duplicates

Six field duplicates were collected during this reporting period, one per sampling event, which exceeds the minimum quality objective of 10%. One of the analytes, ethyl acetate in SDG# 320-46376-1, detected in the six field duplicates exceeded the quality objective of +/- 15% relative percent difference (RPD). Seven analytes were detected near the reporting limit in either the sample or duplicate, and in comparison, were reported as a non-detect in the associated sample or duplicate. Five sample and duplicate analyte detections were within the quality objective of +/- 15% RPD. There were no other detections associated with the samples and associated duplicates collected during this reporting period.

4.1.4 Canister Pressure

Vacuum in the canisters is measured before and after sampling with an analog pressure gauge to ensure proper function. Final canister vacuums ranged from -5 inches mercury (Hg) to -1 inches Hg during this reporting period.

4.1.5 Radiological

The detector for onsite gross alpha and beta sample analysis is calibrated annually by a third-party vendor using sources traceable to the NIST. The detector is checked in by counting alpha- and beta-emitting sources at the site when received from the vendor following calibration. This establishes an acceptable performance range for daily source checks. On each day the detector is used, performance is determined with the site source. The detector may be used if the daily check is within the acceptable performance range.

Samples analyzed at the offsite laboratory have QC checks performed at the laboratory. These QC checks include blanks, laboratory replicates, matrix spikes, and matrix spike duplicates. Barium, which behaves chemically similar to radium, is used as a carrier to determine the yield of the chemical extraction. The

acceptable yield per laboratory procedure is from 40 to 110%. The barium yield was greater than 110% for all radium analyses. When the yield is higher than that allowed, then the analytical results for radium-226 and radium-228 are biased low. All results were less than the laboratory MDC. In all cases, the radium-226 and radium-228 results when evaluated against the MDC were more than 1,000 times less than the airborne effluent limits listed in 10 CFR 20, Appendix B, Table 2. Thus, there is no reason to suspect that there was an airborne release of radium-226 or radium-228 that was of any significance.

A minimum of 20% of the annual radiological analytical results are undergoing third-party data validation. The SDG from this quarter as well as Q3 underwent the annual data validation exceeding the minimum of 20%.

4.1.6 Meteorological

Data validation screening was performed on the recorded meteorological data routinely throughout the reporting period following each weekly data download. Data validation screening was based on Table 8 – Screening Criteria of the EPA’s *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000), as discussed in Section 3.1. The data validation screening provided the basis for evaluating data completeness and for determining sensor performance and/or maintenance status.

4.1.7 Maintenance

Equipment maintenance performed during this reporting period included the following:

- Cleaned MetOne E-BAM nozzle/vane, as needed
- Cleaned PM₁₀ inlets and downtubes, as needed.

4.1.8 Corrective Action

The following issue and corrective actions regarding the PM₁₀ monitors and the Meteorological stations are noted in Section 4.1.9, PM₁₀ Monitors; and Section 4.1.10, Meteorological Station. No issues or corrective actions were noted regarding the remaining monitoring equipment or sampling events during this reporting period.

4.1.9 PM₁₀ Monitors

The MetOne E-BAM monitor at DOE-4 was down from November 8 to December 18, 2018, as discussed in Section 3.2. The E-BAM monitor was replaced and running on December 19, 2018.

4.1.10 Meteorological Station

During Q3, from October 15 to November 7, which was prior to the November 2018 wildfire, the data validation screening performed on the meteorological dataset from the DOE-4 station revealed no issues impacting the data quality and data completeness. The wildfire that impacted the DOE-4 site in early November caused major damage to the meteorological station. This resulted in 41 days of lost data extending from November 7 until the station’s data logger and sensors were replaced and restarted on December 18, 2018.

Meteorological Station Repair – Remediation of the fire-damaged meteorological station involved a complete rebuild of the data collection system, including a new data logger, meteorological sensors, communication devices, and all wiring. On-hand spare equipment was not included in the scope of the baseline monitoring project. Therefore, upon safe access to the site and assessment of the fire damage, replacement equipment was ordered from Met One Instruments. The station rebuild was completed and

the station was placed back in service on December 18, 2018. All sensors were replaced with the exception of relative humidity. This sensor was located within a protective cylinder and was assumed to be undamaged. However, after start-up of the rebuilt station, it was determined that the relative humidity sensor was not operating properly. A new relative humidity sensor was ordered from Met One Instruments but had not yet arrived at the site by the end of Q3. All other new sensors were performing properly.

Delta Temperature Calculation – During the data validation procedure, it was determined that the new data logger (i.e., starting December 18) had been programmed to calculate delta temperature inversely to how it had been calculated in the original data logger (i.e., prior to November 7). Consequently, the new delta temperature observations were being calculated with an opposite sign compared to the previous observations. The equations below represent the before and after delta temperature calculations:

- Prior to November 7, 2018:

$$\text{Delta Temperature} = [\text{Temperature @ 10 m}] \text{ minus } [\text{Temperature @ 2 m}] \quad (\text{Eq. 4-1})$$

- November 7 to December 18, 2018:

Missing

- After December 18, 2018:

$$\text{Delta Temperature} = [\text{Temperature @ 2 m}] \text{ minus } [\text{Temperature @ 10 m}] \quad (\text{Eq. 4-2})$$

For consistency with the earlier data collection quarters, the delta temperature calculation in the new data logger has been modified to use Equation 4-1. The modification occurred in February 2019, and after the end of Q3. For the final validated dataset, an adjustment factor of “-1” was applied to all delta temperature observations between December 18, 2018, and January 14, 2019. A similar adjustment will be made to the Q4 delta temperature observations starting January 15, 2019, and ending on the date/time when the equation update in the new data logger has been implemented.

Meteorological Data Sensor Maintenance – Although not a corrective action, the recommended maintenance frequency for the meteorological sensors is presented in Table 9. Proper and timely maintenance of the meteorological sensors is critical for ensuring that the data are not only valid (based on screening criteria) but also accurate. Schedules for maintenance and calibration are listed in the sensor user manual, based on the service time of the sensor. Table 9 lists the maintenance schedules for the Met One sensors installed at the DOE-4 meteorological station. With the meteorological sensors having been replaced in December 2018, the new units have not been in service long enough to need mechanical maintenance.

Table 10. Meteorological sensor recommended maintenance frequency (Met One).

Sensor	Frequency	Maintenance
WS	6-12 Month	Inspect for proper operation (manual check of pulses per revolution, bearing condition, anemometer cup condition, and bearing replacement if warranted)
	12-24 month	Return to Met One for complete overhaul.
WD	6-12 Month	Inspect for proper operation (manual check of sensor readings through 360°)
	6-12 Month	Field calibration
	12-24 month	Replace bearings & potentiometer
T	6-12 Month	Inspect sensor for proper operation (field comparison sensor reading against a precision mercury thermometer)
RH	6-12 Month	Inspect sensor for proper operation (compare sensor reading against local weather service or field psychrometer)
	12 Month	Return sensor to Met One for calibration and replacement of O-rings and filter membrane
Rain Gauge	6 Month	Clean sensor and bucket and field verify proper operation
Pressure	12 Month	Return sensor to Met One for calibration and replacement of O-rings and filter membrane
Radiometer	Monthly	Clean sensor glass dome with clean rag/tissue
<u>Note</u> – Maintenance schedules as specified in the respective Met One sensor user manuals.		

4.2 Laboratory QA/QC

This report covers 30 air monitoring samples for VOCs collected and analyzed according to the EPA Toxic Compendium Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)* (EPA 1999). These samples were reported under six SDGs by the laboratory. The analyses were performed by Test America Group in Sacramento, CA. For each SDG, the laboratory ran continuing calibration verification, a method blank, and laboratory control samples, and verified surrogate recoveries for each sample.

4.3 Audit Results

The PM₁₀ instruments were calibrated at the manufacturer and were functioning properly upon installation. The PM₁₀ instruments were audited monthly with a secondary NIST traceable flow meter. Although audits occur only monthly, the instruments were checked to ensure that they were functioning several times a week. Table 10 lists the dates for audits conducted in October through January. No flow rate comparisons exceeded the project's acceptance criterion of +/- 7%. DOE-4 was not audited in November due to the damage caused by the wildfire. Complete audit reports are presented in Appendix C.

Table 10. PM₁₀ audit completeness.

Location	MetOne E-BAM Serial Number	Parameter	Date
DOE-1	X16067	PM ₁₀	11/30/2018
DOE-2	W23314	PM ₁₀	11/30/2018
DOE-3	W23313	PM ₁₀	11/30/2018
DOE-1	X16067	PM ₁₀	12/19/2018
DOE -2	W23314	PM ₁₀	12/19/2018
DOE-3	W23313	PM ₁₀	12/19/2018
DOE-4	W23310	PM ₁₀	12/19/2018

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5. SUMMARY

This report summarizes the air monitoring data collected during the Q3 reporting period: October 15, 2018, through January 14, 2019. The November 2018 Woolsey Fire severely damaged station DOE-4 for PM10, Meteorological and Radiological air monitoring. Due to the fire, there was a significant amount of data lost for the Q3 monitoring period. The gross alpha and beta results for the samplers operating during the fire was within the range of the gross alpha and beta results for the all other Q3 samples. The individual radionuclide data for the samples collected during the fire showed no different results than the rest of the sample filters from Q3. No man-made radionuclides that are contaminants of concern at ETEC were detected. This conclusion agrees with data collected, analyzed, and reported by the State of California Department of Toxic Substances Control, Los Angeles County Emergency Response Organization, the DOE Emergency Response or other Multi-Agency Task Forces. The remaining data was validated and there are no increases in the Q3 Baseline Air Monitoring results.

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6. REFERENCES

- 10 Code of Federal Regulations (CFR) 20, Appendix B, “Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage,” Table 2.
- 40 CFR 58, Appendix C –Ambient Air Quality Monitoring Methodology.
- California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2018a. *Approval of the Final Air Monitoring Station Locations for the Santa Susana Field Laboratory, Ventura County, California*. January.
- California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2018b. Human and Ecological Risk Office Human Health Risk Assessment Note Number 3, DTSC-modified Screening Levels. June. <https://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-June-2018.pdf>.
- National Aeronautics and Space Administration (NASA). 2017. *Santa Susana Field Laboratory Baseline Air Monitoring Report Work Plan Report*. Prepared for California Department of Toxic Substances Control. Prepared on behalf of National Aeronautics and Space Administration, George C. Marshall Space Flight Center, The Boeing Company, and Department of Energy, Energy Technology and Engineering Center. September. Available online at: https://www.dtsc-ssfl.com/files/lib_air_monitor/work_plan/67496_SSFL_AirMonitoringWorkPlan_Final.pdf
- U.S. Environmental Protection Agency (EPA). 1999. *Air Method, Toxic Organics-15 (TO-15), Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*. EPA 625/R-96/010b. January. Available online at: <https://www.epa.gov/homeland-security-research/epa-air-method-toxic-organics-15-15-determination-volatile-organic>
- U.S. Environmental Protection Agency (EPA). 2000. *Meteorological Monitoring Guidance for Regulatory Modeling Applications, United State Environmental Protection Agency, Office of Air Quality Planning and Standards*. EPA-454/R-99-005. February 2000.
- U.S. Environmental Protection Agency (EPA). 2017. *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Ambient Air Monitoring Program*. EPA-454/B-17-001. January 2017.
- U.S. Environmental Protection Agency (EPA). 2018. Regional Screening Levels – Generic Tables. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>. May.

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Figure 1

SSFL Air Monitoring Locations

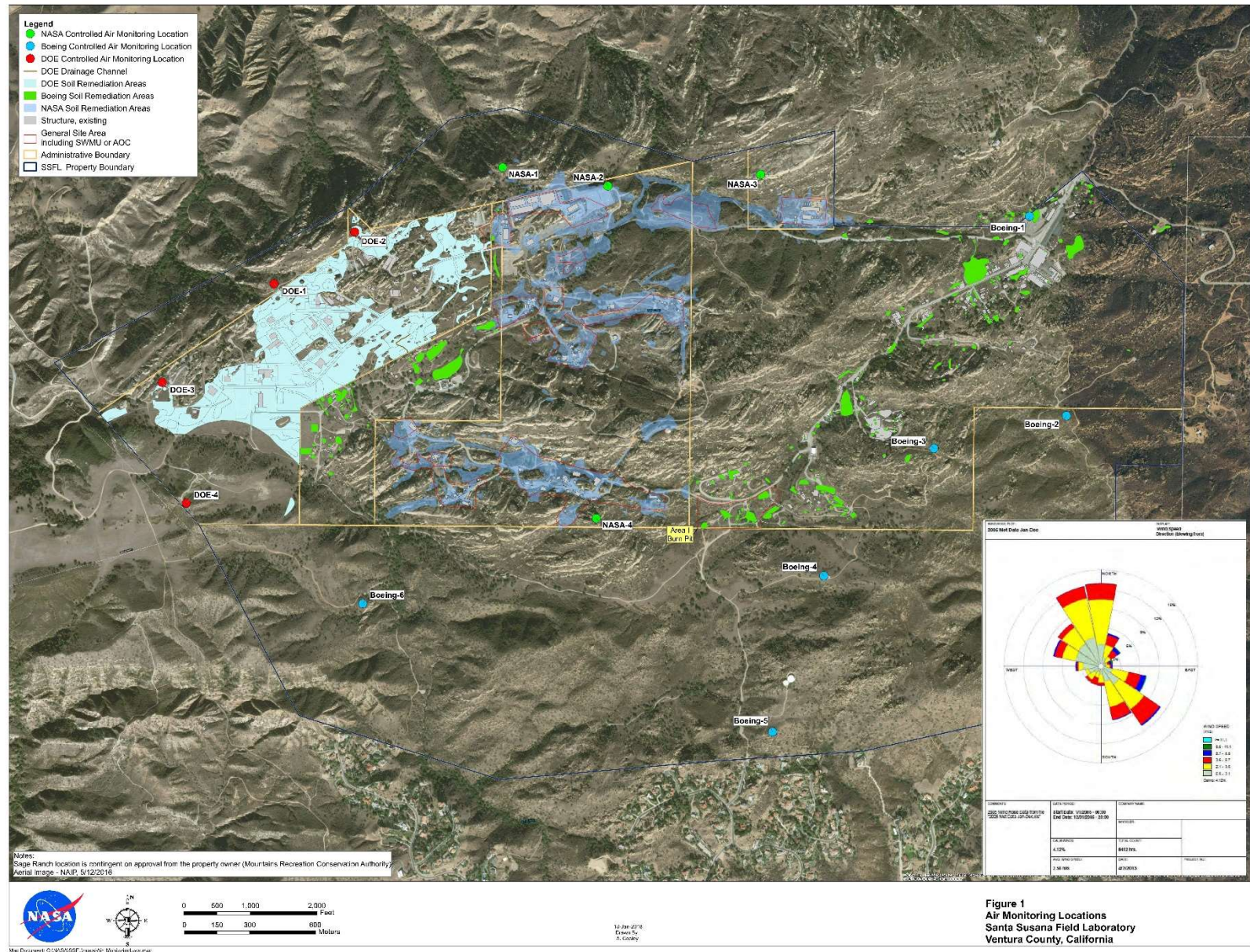


Figure 2
DOE Air Monitoring Locations

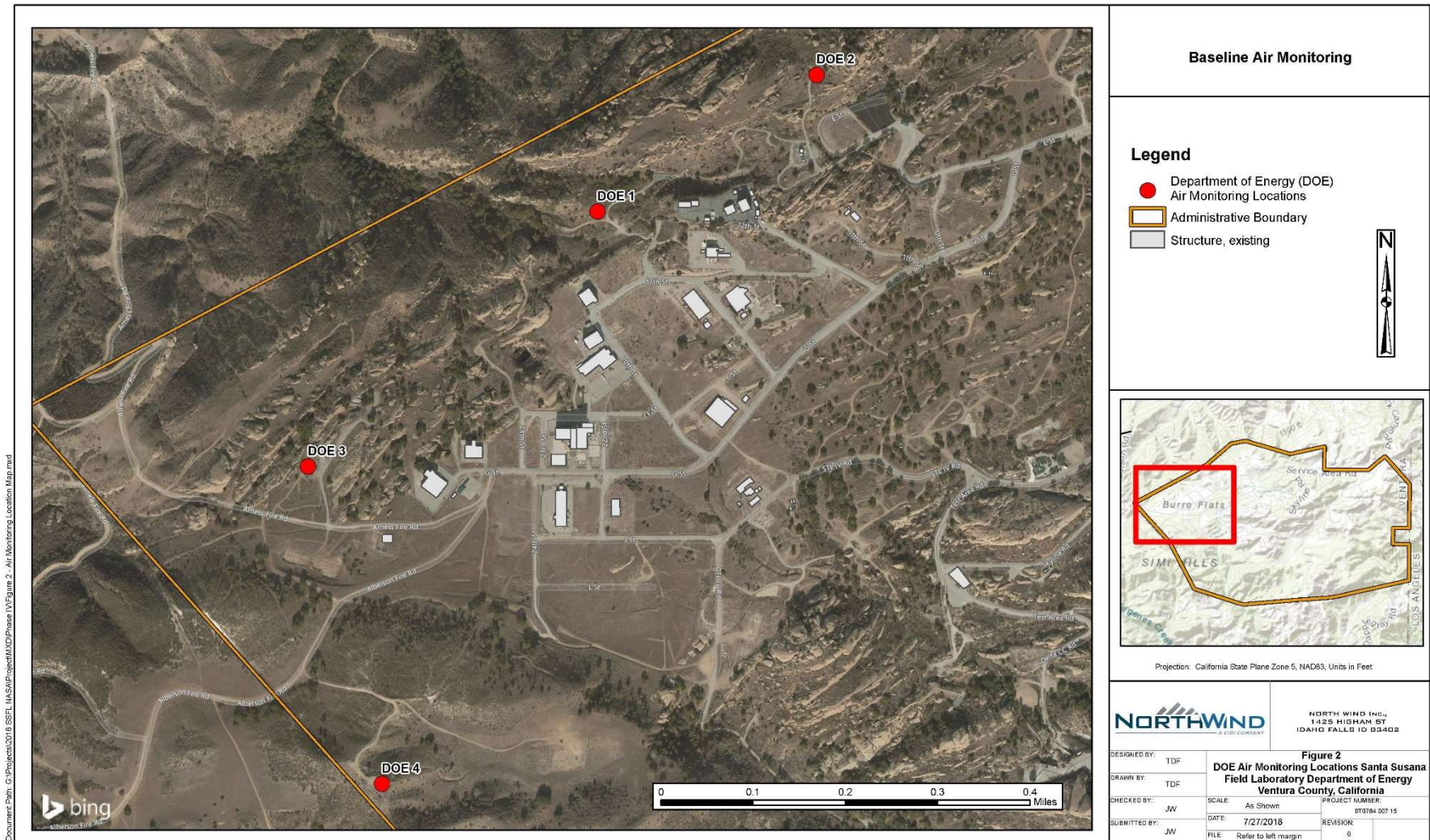
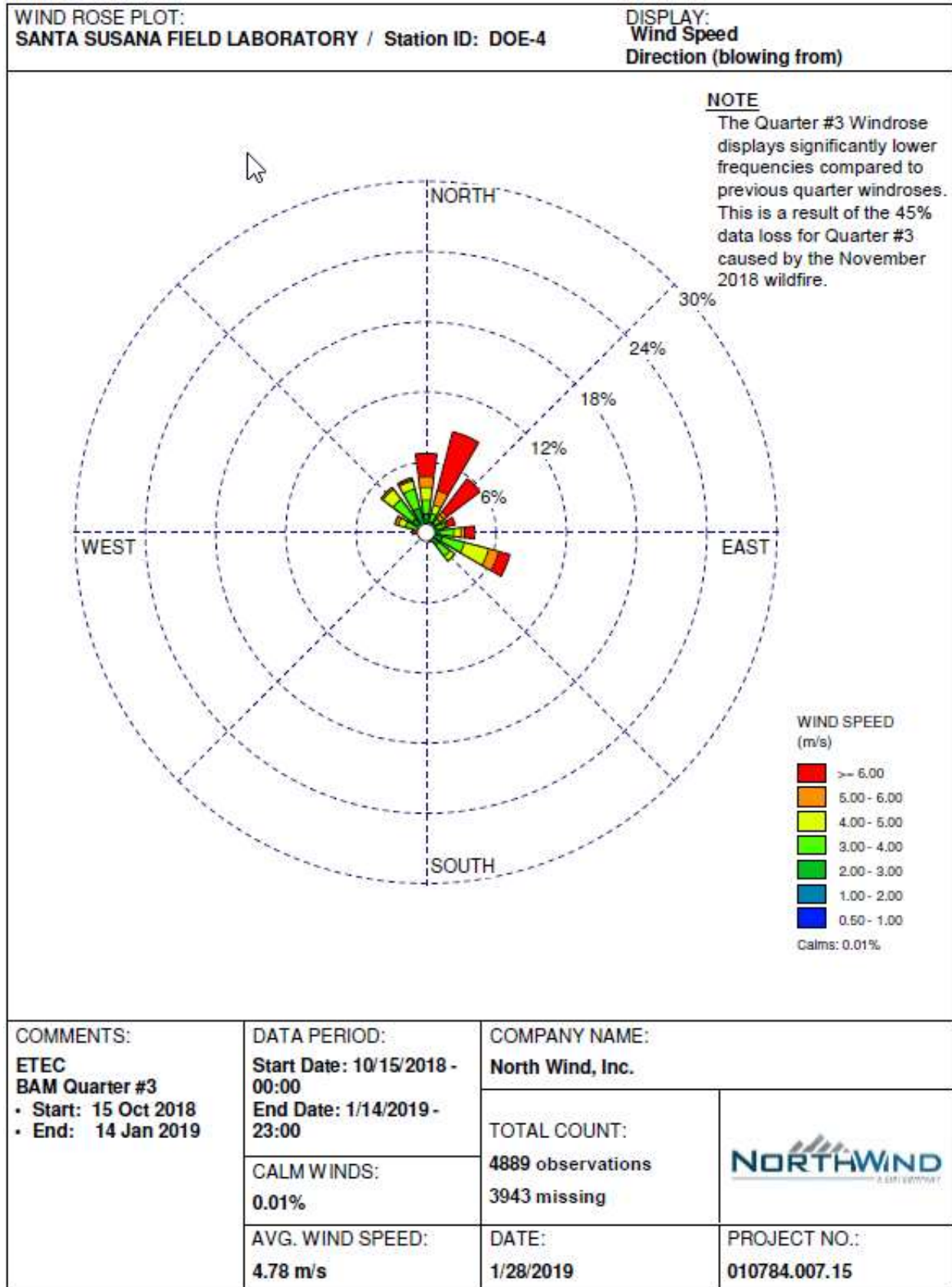


Figure 3
DOE Quarterly Windrose



APPENDIX A

PM₁₀ Daily Averages and Monthly Statistics

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PM₁₀ Daily Averages

Site ID	DOE-1	DOE-2	DOE-3	DOE-4
Sample Date	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
10/15/18	16.04167	16.62500	15.29167	46.45833
10/16/18	5.04167	4.50000	4.79167	5.58333
10/17/18	5.79167	4.79167	4.33333	5.12500
10/18/18	5.95833	4.70833	5.00000	5.16667
10/19/18	9.75000	12.25000	7.83333	14.41667
10/20/18	4.41667	4.95833	3.87500	4.20833
10/21/18	16.62500	15.91667	11.45833	17.00000
10/22/18	19.04167	25.04167	21.00000	20.50000
10/23/18	22.04167	20.58333	18.75000	21.04167
10/24/18	18.70833	14.87500	16.29167	12.29167
10/25/18	23.58333	21.08333	18.79167	18.04167
10/26/18	13.91667	15.04167	15.79167	11.29167
10/27/18	11.66667	10.79167	11.16667	9.45833
10/28/18	14.16667	13.16667	11.91667	11.37500
10/29/18	21.66667	21.41667	18.37500	17.33333
10/30/18	20.20833	20.79167	18.79167	18.87500
10/31/18	9.62500	10.16667	11.50000	13.16667
11/01/18	4.70833	3.50000	3.62500	3.12500
11/02/18	3.87500	3.45833	4.75000	3.87500
11/03/18	7.54167	8.33333	8.25000	7.33333
11/04/18	13.25000	9.50000	12.12500	9.33333
11/05/18	19.41667	15.37500	14.66667	15.16667
11/06/18	17.83333	19.70833	25.20833	20.91667
11/07/18	15.66667	15.58333	14.37500	15.57143
11/08/18	55.12500	66.12500	51.25000	
11/09/18	23.50000	30.37500	30.41667	
11/10/18	21.87500	21.54167	25.20833	
11/11/18	30.29167	28.83333	30.37500	
11/12/18	10.70833	11.41667	10.20833	
11/13/18	8.37500	9.95833	8.25000	
11/14/18	2.33333	3.37500	4.00000	
11/15/18	3.91667	4.00000	4.20833	
11/16/18	11.54167	11.54167	12.79167	
11/17/18	32.04167	36.87500	32.75000	

Site ID	DOE-1	DOE-2	DOE-3	DOE-4
Sample Date	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
11/18/18	21.12500	18.33333	20.41667	
11/19/18	8.16667	9.20833	12.45833	
11/20/18	7.00000	11.83333	11.95833	
11/21/18	7.00000	23.29167	24.12500	
11/22/18	7.00000	6.20833	6.29167	
11/23/18	7.00000	7.29167	8.66667	
11/24/18	7.00000	5.45833	9.16667	
11/25/18	7.00000	3.41667	2.41667	
11/26/18	7.00000	2.33333	2.87500	
11/27/18	7.00000	2.54167	4.70833	
11/28/18	59.04167	12.37500	14.08333	
11/29/18	22.95833	5.50000	4.62500	
11/30/18	10.95833	5.29167	4.00000	
12/01/18	10.58333	6.29167	4.45833	
12/02/18	13.54167	5.50000	3.12500	
12/03/18	2.25000	2.00000	2.41667	
12/04/18	2.70833	2.37500	2.95833	
12/05/18	22.66667	5.04167	15.83333	
12/06/18	14.08333	2.87500	2.33333	
12/07/18	3.45833	1.37500	0.50000	
12/08/18	4.79167	3.79167	3.37500	
12/09/18	3.29167	1.29167	2.04167	
12/10/18	7.12500	3.20833	2.83333	
12/11/18	5.33333	2.29167	2.00000	
12/12/18	8.95833	5.00000	5.37500	
12/13/18	4.04167	4.41667	4.08333	
12/14/18	2.79167	2.37500	3.20833	
12/15/18	7.29167	8.16667	6.91667	
12/16/18	13.08333	11.87500	11.41667	
12/17/18	17.73913	7.08333	13.20833	
12/18/18	8.12500	6.66667	2.12500	
12/19/18	4.25000	1.54167	3.33333	7.33333
12/20/18	3.37500	3.16667	3.62500	4.91667
12/21/18	16.54167	18.62500	24.29167	16.37500
12/22/18	27.16667	23.20833	28.41667	22.00000
12/23/18	10.41667	10.62500	27.04167	6.08333
12/24/18	9.70833	9.16667	12.95833	6.08333
12/25/18	5.37500	4.66667	17.91667	3.00000

Site ID	DOE-1	DOE-2	DOE-3	DOE-4
Sample Date	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
12/26/18	2.16667	2.00000	2.66667	1.62500
12/27/18	14.33333	10.58333	13.50000	19.33333
12/28/18	5.33333	3.54167	4.75000	4.20833
12/29/18	2.41667	1.91667	2.62500	1.87500
12/30/18	6.50000	3.79167	8.08333	3.75000
12/31/18	8.12500	7.70833	7.25000	8.66667
01/01/19	7.95833	4.12500	5.70833	14.79167
01/02/19	1.12500	0.41667	1.41667	0.29167
01/03/19	2.54167	2.70833	2.20833	0.87500
01/04/19	7.41667	7.58333	11.75000	7.04167
01/05/19	22.50000	22.54167	26.70833	23.45833
01/06/19	4.29167	10.12500	2.58333	2.66667
01/07/19	3.45833	1.70833	2.12500	0.12500
01/08/19	5.37500	5.79167	7.33333	4.29167
01/09/19	6.58333	9.20833	7.25000	4.87500
01/10/19	8.91667	11.95833	6.66667	4.75000
01/11/19	21.12500	21.79167	22.08333	19.21739
01/12/19	5.50000	5.87500	5.33333	2.16667
01/13/19	3.45833	4.45833	3.25000	2.87500
01/14/19	4.58333	6.16667	3.83333	1.50000

Note 1: The CAAQS annual average PM₁₀ concentration standard is 20 micrograms per cubic meter (µg/m³) and the 24-hour average PM₁₀ concentration standard is 50 µg/m³.

Note 2: DOE-4 was inoperable from 11/08/18 through 12/18/18 due to the 2018 wildfire.

PM₁₀ Monthly Statistics

Location ID	October 2018			November 2018			December 2018			January 2019		
	PM ₁₀			PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
DOE-1	23.58333	4.41667	22.35000	59.04167	2.33333	44.73750	27.16667	2.16667	20.20290	22.50000	1.12500	21.60625
DOE-2	25.04167	4.50000	22.14167	66.12500	2.33333	33.95000	23.20833	1.29167	15.25000	22.54167	0.41667	22.05417
DOE-3	21.00000	3.87500	19.23333	51.25000	2.41667	31.70000	28.41667	0.50000	25.66667	26.70833	1.41667	23.70208
DOE-4	46.45833	4.20833	26.12500	20.91667	3.12500	19.31310	22.00000	1.62500	20.40000	23.45833	0.12500	20.70172

PCTL = percentile

APPENDIX B

Analytical Results for Ambient Air VOCs

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APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	63	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL ¹
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	5200	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	31	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	3.1	US EPA RSL ¹
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	-----	-----
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	3100	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.021	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	0.076	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	2.6	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	5.2	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	210	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	730	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	10000	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	0.12	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	94	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	8.3	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	6300	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0	U	100	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	141-78-6	Ethyl acetate	8.8	ug/m3	1.1	U	73	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	1.1	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	0.13	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	730	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	210	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	420	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	100	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	11	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	1	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	0.083	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	420	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	100	US EPA RSL ¹
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	1000	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	95-47-6	o-Xylene	< 2	ug/m3	1.7	U	100	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	108-88-3	Toluene	4.9	ug/m3	1.5		310	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1 102418 S-10242018	N	10/24/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0		73	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	141-78-6	Ethyl acetate	3.4	ug/m3	1.1		1.1	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2 102418 S-10242018	N	10/24/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0	U	73	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	141-78-6	Ethyl acetate	5.8	ug/m3	1.1		1.1	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3 102418 S-10242018	N	10/24/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0		73	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	141-78-6	Ethyl acetate	6.4	ug/m3	1.1		1.1	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3 102418 D-10242018	FD	10/24/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0	U	73	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	141-78-6	Ethyl acetate	3.3	ug/m3	1.1	U	1.1	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4 102418 S-10242018	N	10/24/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U U	1000	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U U	0.048	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U U	5200	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U U	0.18	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U U	1.8	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U U	73	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U U	63	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U U	0.0047	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	210	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U U	0.11	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U U	83000	US EPA RSL ¹
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	95-47-6	1,2-dimethyl-benzene	2	ug/m3	1.7	U	63	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U U	210	US EPA RSL ¹
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.26	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U U	5200	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U U	31	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U U	3.1	US EPA RSL ¹
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U U	-----	-----
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U U	3100	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U U	0.021	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U U	0.076	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U U	2.6	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U U	5.2	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U U	210	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U U	420	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U U	730	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U U	10000	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U U	0.12	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U U	94	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U U	8.3	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	-----	-----
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	6300	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U U	100	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0	U U	73	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	141-78-6	Ethyl acetate	1.7	ug/m3	1.1	U U	1.1	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	100-41-4	Ethylbenzene	4.8	ug/m3	1.7	U U	0.13	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U U	730	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U U	420	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U U	100	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	179601-23-1	m,p-Xylene	8.2	ug/m3	3.5	U U	11	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U U	1	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U U	0.083	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U U	420	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U U	100	US EPA RSL ¹
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U U	1000	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U U	100	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U U	940	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U U	2000	EPA IRIS
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	108-88-3	Toluene	3.2	ug/m3	1.5	U U	310	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	83	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	-----	-----
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U U	0.48	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U U	1300	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1 110618 S-11062018	N	11/6/2018	TO15	1330-20-7	Xylenes (Total)	11	ug/m3	5.2	U U	100	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U U	1000	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U U	0.048	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U U	5200	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U U	0.18	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U U	1.8	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U U	73	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U U	63	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U U	0.0047	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	210	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U U	0.11	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U U	83000	US EPA RSL ¹
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U U	63	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U U	210	US EPA RSL ¹
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.26	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U U	5200	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U U	31	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U U	3.1	US EPA RSL ¹
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U U	-----	-----
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U U	3100	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U U	0.021	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U U	0.076	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U U	2.6	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U U	5.2	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U U	210	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U U	420	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U U	730	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U U	10000	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U U	0.12	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U U	94	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	-----	-----
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	6300	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U U	0.13	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U U	100	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0		73	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	141-78-6	Ethyl acetate	1.8	ug/m3	1.1		1.1	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U U	0.13	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U U	730	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U U	420	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U U	100	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U U	11	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U U	1	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U U	0.083	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U U	420	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U U	100	US EPA RSL ¹
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U U	1000	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U U	100	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U U	940	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U U	2000	EPA IRIS
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U U	310	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	83	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	-----	-----
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U U	0.48	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U U	1300	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2 110618 S-11062018	N	11/6/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U U	100	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U U	1000	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U U	0.048	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U U	5200	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U U	0.18	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U U	1.8	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U U	73	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U U	63	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U U	0.0047	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	210	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U U	0.11	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U U	83000	US EPA RSL ¹
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U U	63	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U U	210	US EPA RSL ¹
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.26	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U U	5200	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U U	31	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U U	3.1	US EPA RSL ¹
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U U	-----	-----
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U U	3100	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U U	0.021	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U U	0.076	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U U	2.6	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U U	5.2	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U U	210	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U U	420	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U U	730	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U U	10000	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U U	0.12	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U U	94	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	-----	-----
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	6300	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U U	100	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0		73	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	141-78-6	Ethyl acetate	2.4	ug/m3	1.1		1.1	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U U	0.13	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U U	730	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U U	420	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U U	100	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U U	11	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U U	1	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U U	0.083	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U U	420	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U U	100	US EPA RSL ¹
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U U	1000	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U U	100	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U U	940	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U U	2000	EPA IRIS
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U U	310	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	83	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	-----	-----

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U U	0.48	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U U	1300	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3 110618 S-11062018	N	11/6/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U U	100	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U U	1000	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U U	0.048	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U U	5200	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U U	0.18	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U U	1.8	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U U	73	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U U	63	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U U	0.0047	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	210	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U U	0.11	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U U	83000	US EPA RSL ¹
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U U	63	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U U	210	US EPA RSL ¹
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.26	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U U	5200	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U U	31	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U U	3.1	US EPA RSL ¹
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U U	-----	-----
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U U	3100	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U U	0.021	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U U	0.076	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U U	2.6	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U U	5.2	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U U	210	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U U	420	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U U	730	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-15-0	Carbon disulfide	11	ug/m3	2.5		0.067	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U U	10000	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U U	0.12	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U U	94	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	-----	-----
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	6300	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U U	100	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0		73	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	141-78-6	Ethyl acetate	2.2	ug/m3	1.1		1.1	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U U	0.13	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U U	730	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U U	420	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U U	100	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U U	11	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U U	1	DTSC HHRA Note 3
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U U	0.083	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U U	420	US EPA RSL
DOE-4	DOE-4 110618 S-11062018	N	11/6/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U U	100	US EPA RSL ¹

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U U	1000	US EPA RSL
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U U	100	US EPA RSL
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U U	940	DTSC HHRA Note 3
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U U	2000	EPA IRIS
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U U	310	DTSC HHRA Note 3
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	83	DTSC HHRA Note 3
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	-----	-----
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U U	0.48	US EPA RSL
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U U	1300	DTSC HHRA Note 3
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4_110618_S-11062018	N	11/6/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U U	100	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U U	1000	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U U	0.048	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U U	5200	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U U	0.18	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U U	1.8	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U U	73	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U U	63	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U U	0.0047	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	210	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U U	0.11	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U U	83000	US EPA RSL ¹
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U U	63	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U U	210	US EPA RSL ¹
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.26	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U U	5200	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U U	31	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U U	3.1	US EPA RSL ¹
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U U	-----	-----
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U U	3100	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U U	0.021	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U U	0.076	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U U	2.6	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U U	5.2	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U U	210	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U U	420	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U U	730	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U U	10000	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U U	0.12	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U U	94	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	-----	-----
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	6300	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U U	100	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0	U U	73	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U U	1.1	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U U	0.13	US EPA RSL
DOE-4	DOE-4_110618_D-11062018	FD	11/6/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U U	730	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U U	420	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U U	100	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U U	11	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U U	1	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U U	0.083	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U U	420	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U U	100	US EPA RSL ¹
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U U	1000	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U U	100	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U U	940	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U U	2000	EPA IRIS
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U U	310	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U U	83	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U U	-----	-----
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U U	0.48	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U U	1300	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U U	210	US EPA RSL
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4 110618 D-11062018	FD	11/6/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U U	100	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	622-96-8	4-Ethyltoluene	4.9	ug/m3	2.0	-----	-----	-----
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-1	DOE-1 112018 S-11202018	N	11/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1_112018_S-11202018	N	11/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	141-78-6	Ethyl acetate	2.4	ug/m3	1.1		1.1	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1_112018_D-11202018	FD	11/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-2	DOE-2_112018_S-11202018	N	11/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2 112018 S-11202018	N	11/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	141-78-6	Ethyl acetate	2.3	ug/m3	1.1		1.1	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3 112018 S-11202018	N	11/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	141-78-6	Ethyl acetate	1.5	ug/m3	1.1		1.1	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4 112018 S-11202018	N	11/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-69-4	Trichlorofluoromethane	2.5	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1 120418 S-12042018	N	12/4/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-69-4	Trichlorofluoromethane	2.4	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2 120418 S-12042018	N	12/4/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	8.9	ug/m3	3.1	U	5200	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	622-96-8	4-Ethyltoluene	4.2	ug/m3	2.0	U	-----	-----
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0		73	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	141-78-6	Ethyl acetate	3.7	ug/m3	1.1		1.1	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-69-4	Trichlorofluoromethane	2.3	ug/m3	2.2		1300	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2 120418 D-12042018	FD	12/4/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	108-88-3	Toluene	3.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-69-4	Trichlorofluoromethane	2.4	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3 120418 S-12042018	N	12/4/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-25-2	Bromofrom	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-71-8	Dichlorodifluoromethane	3	ug/m3	2.0	U	73	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4 120418 S-12042018	N	12/4/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0		73	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	141-78-6	Ethyl acetate	2.4	ug/m3	1.1		1.1	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1 122018 S-12202018	N	12/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0	U	73	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	141-78-6	Ethyl acetate	1.5	ug/m3	1.1	U	1.1	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2 122018 S-12202018	N	12/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0	U	73	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	141-78-6	Ethyl acetate	2.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3 122018 S-12202018	N	12/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3_122018_S-12202018	N	12/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0		73	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	141-78-6	Ethyl acetate	3.8	ug/m3	1.1		1.1	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3_122018_D-12202018	FD	12/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3 122018 D-12202018	FD	12/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0	U	73	US EPA RSL
DOE-4	DOE-4 122018 S-12202018	N	12/20/2018	TO15	141-78-6	Ethyl acetate	1.9	ug/m3	1.1	U	1.1	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4_122018_S-12202018	N	12/20/2018	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	141-78-6	Ethyl acetate	1.4	ug/m3	1.1		1.1	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-1	DOE-1_010319_S-01032019	N	1/3/2019	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-2	DOE-2_010319_S-01032019	N	1/3/2019	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-71-8	Dichlorodifluoromethane	2	ug/m3	2.0	U	73	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-3	DOE-3_010319_S-01032019	N	1/3/2019	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	141-78-6	Ethyl acetate	< 1.1	ug/m3	1.1	U	1.1	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4_010319_S-01032019	N	1/3/2019	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	71-55-6	1,1,1-Trichloroethane	< 1.6	ug/m3	1.6	U	1000	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	79-34-5	1,1,2,2-Tetrachloroethane	< 2.7	ug/m3	2.7	U	0.048	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	< 3.1	ug/m3	3.1	U	5200	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	79-00-5	1,1,2-Trichloroethane	< 2.2	ug/m3	2.2	U	0.18	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-34-3	1,1-Dichloroethane	< 1.2	ug/m3	1.2	U	1.8	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-35-4	1,1-Dichloroethene	< 3.2	ug/m3	3.2	U	73	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	120-82-1	1,2,4-Trichlorobenzene	< 15	ug/m3	15	U	0.39	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	95-63-6	1,2,4-Trimethylbenzene	< 3.9	ug/m3	3.9	U	63	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	106-93-4	1,2-Dibromoethane	< 6.1	ug/m3	6.1	U	0.0047	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	95-50-1	1,2-Dichlorobenzene	< 2.4	ug/m3	2.4	U	210	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	107-06-2	1,2-Dichloroethane	< 3.2	ug/m3	3.2	U	0.11	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	78-87-5	1,2-Dichloropropane	< 1.8	ug/m3	1.8	U	0.28	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	76-14-2	1,2-Dichlorotetrafluoroethane	< 2.8	ug/m3	2.8	U	83000	US EPA RSL ¹
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	95-47-6	1,2-dimethyl-benzene	< 2	ug/m3	1.7	U	63	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	108-67-8	1,3,5-Trimethylbenzene	< 2.0	ug/m3	2.0	U	0.017	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	106-99-0	1,3-Butadiene	< 1.8	ug/m3	1.8	U	210	US EPA RSL ¹
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	541-73-1	1,3-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.26	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	106-46-7	1,4-Dichlorobenzene	< 2.4	ug/m3	2.4	U	0.36	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	123-91-1	1,4-Dioxane	< 2.9	ug/m3	2.9	U	5200	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	78-93-3	2-Butanone	< 2.4	ug/m3	2.4	U	31	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	591-78-6	2-Hexanone	< 1.6	ug/m3	1.6	U	3.1	US EPA RSL ¹
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	622-96-8	4-Ethyltoluene	< 2.0	ug/m3	2.0	U	-----	-----
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	99-87-6	4-Isopropyltoluene	< 4.4	ug/m3	4.4	U	3100	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	108-10-1	4-Methyl-2-pentanone	< 1.6	ug/m3	1.6	U	0.021	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	107-02-8	Acrolein	< 4.6	ug/m3	4.6	U	0.0097	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	107-13-1	Acrylonitrile	< 4.3	ug/m3	4.3	U	0.097	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	71-43-2	Benzene	< 1.3	ug/m3	1.3	U	0.057	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	100-44-7	Benzyl chloride	< 4.1	ug/m3	4.1	U	0.076	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-27-4	Bromodichloromethane	< 2.0	ug/m3	2.0	U	2.6	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-25-2	Bromoform	< 4.1	ug/m3	4.1	U	5.2	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	74-83-9	Bromomethane	< 3.1	ug/m3	3.1	U	210	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	104-51-8	Butylbenzene, n-	< 2.2	ug/m3	2.2	U	420	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	135-98-8	Butylbenzene, sec-	< 2.2	ug/m3	2.2	U	730	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-15-0	Carbon disulfide	< 2.5	ug/m3	2.5	U	0.067	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	56-23-5	Carbon tetrachloride	< 5.0	ug/m3	5.0	U	10000	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-00-3	Chloroethane	< 2	ug/m3	2.1	U	0.12	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	67-66-3	Chloroform	< 1.5	ug/m3	1.5	U	94	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	74-87-3	Chloromethane	< 1.7	ug/m3	1.7	U	8.3	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	156-59-2	cis-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	-----	-----
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	10061-01-5	cis-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	6300	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	110-82-7	Cyclohexane	< 1	ug/m3	1.4	U	0.13	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	124-48-1	Dibromochloromethane	< 3.4	ug/m3	3.4	U	100	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-71-8	Dichlorodifluoromethane	< 2	ug/m3	2.0	U	73	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	141-78-6	Ethyl acetate	1.8	ug/m3	1.1		1.1	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	100-41-4	Ethylbenzene	< 1.7	ug/m3	1.7	U	0.13	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	87-68-3	Hexachloro-1,3-butadiene	< 21	ug/m3	21	U	730	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	110-54-3	Hexane, n-	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	67-63-0	Isopropanol	< 4.9	ug/m3	4.9	U	420	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	98-82-8	Isopropylbenzene	< 3.9	ug/m3	3.9	U	100	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	179601-23-1	m,p-Xylene	< 3.5	ug/m3	3.5	U	11	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	1634-04-4	Methyl tert butyl ether	< 2.9	ug/m3	2.9	U	1	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-09-2	Methylene chloride	< 1	ug/m3	1.4	U	0.083	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	91-20-3	Naphthalene	< 4.2	ug/m3	4.2	U	420	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	142-82-5	n-Heptane	< 3.3	ug/m3	3.3	U	100	US EPA RSL ¹
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	111-65-9	n-Octane	< 1.9	ug/m3	1.9	U	1000	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	103-65-1	n-Propylbenzene	< 2	ug/m3	2.0	U	100	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	100-42-5	Styrene	< 2	ug/m3	1.7	U	940	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	127-18-4	Tetrachloroethene	< 2.7	ug/m3	2.7	U	0.46	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	109-99-9	Tetrahydrofuran	< 2.4	ug/m3	2.4	U	2000	EPA IRIS
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	108-88-3	Toluene	< 1.5	ug/m3	1.5	U	310	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	156-60-5	trans-1,2-Dichloroethene	< 1.6	ug/m3	1.6	U	83	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	10061-02-6	trans-1,3-Dichloropropene	< 1.8	ug/m3	1.8	U	-----	-----
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	79-01-6	Trichloroethene	< 2.1	ug/m3	2.1	U	0.48	US EPA RSL

APPENDIX B
Analytical Results for Ambient Air VOCs

Location ID	Sample ID	Sample Type	Sample Date	Analytical Method	CAS Number	Analyte	Result	Units	Reporting Limit	Qualifier ²	Screening Level Value	SL Source
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-69-4	Trichlorofluoromethane	< 2.2	ug/m3	2.2	U	1300	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	108-05-4	Vinyl acetate	< 2.8	ug/m3	2.8	U	210	US EPA RSL
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	75-01-4	Vinyl chloride	< 1.0	ug/m3	1.0	U	0.0095	DTSC HHRA Note 3
DOE-4	DOE-4_010319_D-01032019	FD	1/3/2019	TO15	1330-20-7	Xylenes (Total)	< 5.2	ug/m3	5.2	U	100	US EPA RSL

Legend

N = Normal (Parent) Sample

FD = Field Duplicate Sample

U = Non-Detect

* = LCS or LCSD is outside acceptance limits

----- = Screening Level Not Available

 = Detection above the Reporting Limit, but below the EPA or DTSC Screening Level

BOLD = Detection above the Reporting Limit, and also exceeds the EPA or DTSC Screening Level

Footnotes:

1 - RSL based on surrogate 1,1,1,2-Tetrafluoroethane (1,2-Dichlorotetrafluoroethane);
1,2-Dichlorobenzene (1,3-Dichlorobenzene); TPH, aromatic medium (4-Ethyltoluene);
and TPH, aliphatic medium (n-Octane)

2 - Qualifier column contains laboratory flags (normal font) and validation qualifiers (italics)

APPENDIX C

PM₁₀ Monthly Audit Reports

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Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-1

Serial # X16067

Audit Date: 11/30/2018

Audited By: T. STEWART WILLIFORD

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.4 LPM as left: 0.4 LPM

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>16.2</u> °C	<u>15.3</u> °C	as left:	<u>16.2</u> °C	<u>15.3</u> °C
Barometric Pressure:	as found:	<u>713</u> mmHg	<u>711</u> mmHg	as left:	<u>713</u> mmHg	<u>711</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.70</u> lpm	<u>16.87</u> lpm	as left:	<u>16.70</u> lpm	<u>16.80</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.15</u> lpm	as left:	<u>14.0</u> lpm	<u>14.15</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.71</u> lpm	as left:	<u>17.5</u> lpm	<u>17.71</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Expected Span Mass (mg/cm2): 0.906 mg/cm2

Measured Span Mass (mg/cm2): 0.915 mg/cm2

Difference (mg/cm2): 0.009

% Difference / Pass or Fail: 0.98% Pass

Pump Test

Flow Rate	Vacuum Value	Quality Category
14.0 - 15.0 (lpm)	(Hg)	Good / Marginal / Poor
<u>14.3</u>	<u>395.3</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1131</u>	<u>1131</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Actual</u>
Location	<u>01</u>	<u>01</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5V</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25°C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15°C</u>	DAC	8.0 v	<u>8.0V</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0V</u>	Flow Setpoint	16.7	<u>16.7 lpm</u>	Pump Protect	Off	<u>OFF</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No New Messages</u>	<u>11/30/18</u>	<u>1135</u>	<u>4</u>		
<u>2</u>			<u>5</u>		
<u>3</u>			<u>6</u>		

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-2

Serial # W23314

Audit Date: 11/30/2018

Audited By: T. Stewart Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.4 LPM as left: 0.4 LPM

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>16.7</u> °C	<u>15.3</u> °C	as left:	<u>16.7</u> °C	<u>15.3</u> °C
Barometric Pressure:	as found:	<u>708.8</u> mmHg	<u>707.5</u> mmHg	as left:	<u>708.8</u> mmHg	<u>707.5</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.71</u> lpm	as left:	<u>16.7</u> lpm	<u>16.71</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.08</u> lpm	as left:	<u>14.0</u> lpm	<u>14.08</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.60</u> lpm	as left:	<u>17.5</u> lpm	<u>17.60</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Expected Span Mass (mg/cm²): 0.914 mg/cm²

Measured Span Mass (mg/cm²): 0.929 mg/cm²

Difference (mg/cm²): 0.015

% Difference / Pass or Fail: 1.61% Pass

Pump Test

Flow Rate
14.0 - 15.0
(lpm)

Vacuum
Value
(Hg)

Quality Category
Good / Marginal / Poor

14.4

391.0

Good

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1328</u>	<u>1328</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Actual</u>
Location	<u>D2</u>	<u>D2</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25°C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15°C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>No</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7 lpm</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No New Messages</u>	<u>11/30/18</u>	<u>4</u>			
<u>2</u>		<u>5</u>			
<u>3</u>		<u>6</u>			

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-3

Serial # W23313

Audit Date: 11/30/2018

Audited By: J. Stewart Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.5 lpm as left: 0.5 lpm

	E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found: <u>16.4</u> °C	<u>15.9</u> °C	as left:	<u>16.4</u> °C	<u>15.9</u> °C
Barometric Pressure:	as found: <u>710.3</u> mmHg	<u>709.0</u> mmHg	as left:	<u>710.3</u> mmHg	<u>709.0</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	<u>16.94</u> lpm	as left:	<u>16.7</u> lpm	<u>16.94</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	<u>14.16</u> lpm	as left:	<u>14.0</u> lpm	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	<u>17.81</u> lpm	as left:	<u>17.5</u> lpm	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>N</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>N</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Expected Span Mass (mg/cm2): 0.896

Measured Span Mass (mg/cm2): 0.894

Difference (mg/cm2): 0.002

% Difference / Pass or Fail: 0.22% PASS

Pump Test

Flow Rate	Vacuum Value	Quality Category
14.0 - 15.0 (lpm)	(Hg)	Good / Marginal / Poor
<u>14.8</u>	<u>401.7</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1458</u>	<u>1458</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>03</u>	<u>03</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25°C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15°C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0 v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No New Messages</u>	<u>1504</u>	<u>11/30/18</u>	<u>4</u>		
<u>2</u>			<u>5</u>		
<u>3</u>			<u>6</u>		

Audit Notes:



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-4

Serial # W22316

Audit Date: 11/30/2019

Audited By: TS williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value:

as found: _____

as left: _____

Ambient Temperature:

as found: _____

°C

as left: _____

°C

Barometric Pressure:

as found: _____

mmHg

as left: _____

mmHg

16.7 lpm Flow Rate

as found: _____

lpm

as left: _____

lpm

14.0 lpm Flow Rate

as found: _____

lpm

as left: _____

lpm

17.5 lpm Flow Rate

as found: _____

lpm

as left: _____

lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean: as found _____

as left _____

Tape support vane clean: as found _____

as left _____

Tape spool covers tight: as found _____

as left _____

PM10 particle trap clean: as found _____

as left _____

PM10 drip jar empty: as found _____

as left _____

PM10 bug screen clear: as found _____

as left _____

Manual Span Membrane Test

Expected Span Mass (mg/cm²) :

Measured Span Mass (mg/cm²) :

Difference (mg/cm²) :

% Difference / Pass or Fail:

Pump Test

Flow Rate

Vacuum

Quality Category

14.0 - 15.0

Value

Good / Marginal / Poor

(lpm)

(Hg)

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock			Analog Mode	Hourly		Flow Type	Actual	
Location			Baud Rate	9600		Restart Voltage	12.5 v	
Tape Advance	24 hrs		RH Setpoint	45%		Std Cond Temp	25 C	
Realtime Avg	60 mins		Delta T Setpoint	15 C		DAC	8.0 v	
Machine Type	PM-10		RH Control	On		RH Connect	No	
Analog FS	1.0 v		Flow Setpoint	16.7		Pump Protect	Off	

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
1			4		
2			5		
3			6		

Audit Notes:

- * This unit was damaged in the 11/08/2018 Woolsey fire.
- * The unit is currently being evaluated to see if it can be fixed or if it will be replaced.



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-1

Serial # X16067

Audit Date: 12/19/2018

Audited By: JS Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.4 as left: 0.4

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	24.7 °C	23.7 °C	as left:	24.7 °C	23.7 °C
Barometric Pressure:	as found:	717.7 mmHg	715.5 mmHg	as left:	717.7 mmHg	715.5 mmHg
16.7 lpm Flow Rate	as found:	16.7 lpm	16.95 lpm	as left:	16.7 lpm	16.95 lpm
14.0 lpm Flow Rate	as found:	14.0 lpm	14.14 lpm	as left:	14.0 lpm	14.14 lpm
17.5 lpm Flow Rate	as found:	17.5 lpm	17.78 lpm	as left:	17.5 lpm	17.78 lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Expected Span Mass (mg/cm2): 0.906

Measured Span Mass (mg/cm2): 0.900

Difference (mg/cm2): 0.006

% Difference / Pass or Fail: 0.66% PASS

Pump Test

Flow Rate	Vacuum Value	Quality Category
14.0 - 15.0 (lpm)	(Hg)	Good / Marginal / Poor
<u>14.9</u>	<u>402.8</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1526</u>	<u>1526</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>01</u>	<u>01</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5V</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25°C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15°C</u>	DAC	8.0 v	<u>8.0V</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0V</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>OFF</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
1 <u>No New Messages</u>	<u>12/19/18</u>	<u>15:35</u>	4		
2			5		
3			6		

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-2

Serial # W23314

Audit Date: 12/19/2018

Audited By: TS Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.4 as left: 0.4

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>22.9</u> °C	<u>22.0</u> °C	as left:	<u>22.9</u> °C	<u>22.0</u> °C
Barometric Pressure:	as found:	<u>713.7</u> mmHg	<u>712.5</u> mmHg	as left:	<u>713.7</u> mmHg	<u>712.5</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.88</u> lpm	as left:	<u>16.7</u> lpm	<u>16.88</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.13</u> lpm	as left:	<u>14.0</u> lpm	<u>14.13</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.69</u> lpm	as left:	<u>17.5</u> lpm	<u>17.69</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Expected Span Mass (mg/cm2): 0.914

Measured Span Mass (mg/cm2): 0.927

Difference (mg/cm2): 0.013

% Difference / Pass or Fail: 1.4% PASS

Pump Test

Flow Rate	Vacuum Value	Quality Category
14.0 - 15.0 (lpm)	(Hg)	Good / Marginal / Poor
<u>14.1</u>	<u>385.0</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1555</u>	<u>1555</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>02</u>	<u>02</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5V</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25°C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15°C</u>	DAC	8.0 v	<u>8.0V</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0V</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>OFF</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
1 <u>No New Messages</u>	<u>12/19/18</u>	<u>1559</u>	4		
2			5		
3			6		

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-3

Serial # W23313

Audit Date: 12/19/2018

Audited By: TS Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.5 as left: 0.5

	E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found: <u>24.9</u> °C	<u>23.0</u> °C	as left: <u>24.9</u> °C	<u>23.0</u> °C	
Barometric Pressure:	as found: <u>716.0</u> mmHg	<u>715.0</u> mmHg	as left: <u>716.0</u> mmHg	<u>715.0</u> mmHg	
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	<u>16.98</u> lpm	as left: <u>16.7</u> lpm	<u>16.98</u> lpm	
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	<u>14.12</u> lpm	as left: <u>14.0</u> lpm	<u>14.12</u> lpm	
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	<u>17.81</u> lpm	as left: <u>17.5</u> lpm	<u>17.81</u> lpm	

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Expected Span Mass (mg/cm2): 0.896

Measured Span Mass (mg/cm2): 0.894

Difference (mg/cm2): 0.002 PASS

% Difference / Pass or Fail: 0.22% PASS

Pump Test

Flow Rate	Vacuum Value	Quality Category
14.0 - 15.0 (lpm)	(Hg)	Good / Marginal / Poor
<u>14.3</u>	<u>393.4</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1351</u>	<u>1351</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>03</u>	<u>03</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5 v</u>
Tape Advance	24 hrs	<u>24 hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25 °C</u>
Realtime Avg	60 mins	<u>60 min</u>	Delta T Setpoint	15 C	<u>15 °C</u>	DAC	8.0 v	<u>8.0 v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0 v</u>	Flow Setpoint	16.7	<u>16.7 lpm</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
1 <u>No New Messages</u>	<u>12/19/18</u>	<u>1400</u>	4		
2			5		
3			6		

Audit Notes:



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-4

Serial # W23310

Audit Date: 12/19/2018

Audited By: T.S. Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 12/19/2017

Leak Check Value: as found: 0.6 as left: 0.6

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>23.2</u> °C	<u>22.0</u> °C	as left:	<u>23.2</u> °C	<u>22.0</u> °C
Barometric Pressure:	as found:	<u>708.5</u> mmHg	<u>707.0</u> mmHg	as left:	<u>708.5</u> mmHg	<u>707.0</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.75</u> lpm	as left:	<u>16.7</u> lpm	<u>16.75</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>13.81</u> lpm	as left:	<u>14.0</u> lpm	<u>13.81</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.55</u> lpm	as left:	<u>17.5</u> lpm	<u>17.55</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test			Pump Test		
Expected Span Mass (mg/cm2):	<u>0.921</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor	
Measured Span Mass (mg/cm2):	<u>0.944</u>				
Difference (mg/cm2):	<u>0.023</u>				
% Difference / Pass or Fail:		<u>2.4% PASS</u>	<u>14.4</u>	<u>403.4</u>	<u>Good/Marginal</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1312</u>	<u>1312</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>ACT</u>
Location	<u>04</u>	<u>04</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5V</u>
Tape Advance	24 hrs	<u>24hrs</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25°C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15°C</u>	DAC	8.0 v	<u>8.0V</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>ON</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0V</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>OFF</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
1 <u>No New Messages</u>	<u>12/19/18</u>	<u>1320</u>	4		
2			5		
3			6		

Audit Notes: Initial audit. Unit was started today @ 1235.